

Development Consent Order Application No. TR010021 Silvertown Tunnel

London Borough of Bexley – Local Impact Report

1 Terms of Reference

- 1.1 This Local Impact Report (LIR) contains details of the likely impact of the proposed Silvertown Tunnel on the London Borough of Bexley. It has been prepared in accordance with the advice set out in Advice Note No 1: Local Impact Reports issued by the Planning Inspectorate in April 2012 (Version 2).
- 1.2 The LIR consists of a statement of positive, neutral and negative impacts in order to assist the Examining Authority in identifying local issues which might not otherwise come to its attention in the examination process.
- 1.3 This LIR also contains the Council's views on DCO articles, requirements and DCO obligations as proposed by the applicant and how those articles, requirements and obligations could be improved.
- 1.4 For the purposes of this report references the “the Council” mean the local authority for the London Borough of Bexley. References to the “Borough” mean the geographical area for which the Council is the local authority.

2 Need for the Scheme

- 2.1 The regular congestion at the Blackwall Tunnel frequently affects the approach routes including the A2 out as far as Bexley Borough. This impacts upon air quality and makes journeys less reliable. In addition, this situation seriously affects the economic growth potential of east and south east London. With the population of east and south east London set to grow significantly these problems will be exacerbated if a solution is not provided.
- 2.2 A new tunnel at Silvertown will provide a viable alternative for some users of the Blackwall Tunnel, as well as high vehicles that currently divert to the Woolwich Ferry because the Victorian northbound tunnel at Blackwall is too low. The new tunnel will reduce congestion making journeys more reliable.
- 2.3 It will also create opportunities for new public transport connections across the river. There are comprehensive networks of bus services either side of the river. However, these largely operate independently of one another. Route 108 (Lewisham-Stratford) is the only bus service to cross the river at Blackwall. It is restricted to single-deck bus operation and its reliability can be severely affected by traffic conditions at Blackwall. In addition, the congestion at the Blackwall Tunnel significantly disrupts bus services across a wider area on both sides of the Thames.
- 2.4 The new Silvertown Tunnel would greatly reduce congestion at the Blackwall Tunnel, which currently impacts on existing services, as well as providing the opportunity for new and more reliable cross-river bus services using double-decker buses. TfL has advised that they will continue to develop proposals for new bus connections and will publish a list of new and/or revised routes about two years prior to the tunnel opening.

3 Description of Scheme

- 3.1 The Scheme would comprise a new dual two-lane connection between the A102 Blackwall Tunnel Approach on Greenwich Peninsula (Royal Borough of Greenwich) and the Tidal

Basin roundabout junction on the A1020 Lower Lea Crossing/A1011 Silvertown Way (London Borough of Newham) by means of twin tunnel bores under the River Thames and associated approach roads. The Silvertown Tunnel would be approximately 1.4km long.

- 3.2 On the north side, the tunnel approach road connects to the Tidal Basin Roundabout, which would be altered to create a new signal-controlled roundabout linking the Silvertown Way, Dock Road and the Lower Lea Crossing. Dock Road would be realigned to accommodate the new tunnel and approach road.
- 3.3 On the south side, the A102 would be widened to create new slip-road links to the Silvertown Tunnel. A new flyover would be built to take southbound traffic exiting the Blackwall Tunnel over the northbound approach to the Silvertown Tunnel.
- 3.4 The Boord Street footbridge over the A102 would be replaced with a new pedestrian and cycle bridge. Portal buildings would be located close to each portal to house the plant and equipment necessary to operate the tunnel, including ventilation equipment.
- 3.5 The tunnel has been designed to accommodate taller HGVs and double-deck buses and would include a dedicated bus/coach and Heavy Goods Vehicle (HGV) lane, which would provide opportunities to provide additional cross-river bus routes.
- 3.6 The introduction of free-flow user charging on both the Blackwall and Silvertown Tunnels would play a fundamental part in managing traffic demand. It would also support the financing of the construction and operation of the Silvertown Tunnel.

4 Relevant Strategic Planning Policies and Strategies

- 4.1 DCO applications must be determined in accordance with the relevant National Policy Statement (NPS). For highway schemes, the relevant NPS is the NPS on National Networks (December 2014).
- 4.2 The Secretary of State will use this NPS as the primary basis for the decision on the DCO application made by TfL.
- 4.3 For schemes which have been designated as “nationally significant”, such as this scheme, the NNNPS states that:
'the relevant development plan is also likely to be an important and relevant matter especially in respect of establishing the need for the development'.
- 4.4 In this case the relevant development plan is the London Plan together with the local development plans of the three host boroughs for the Scheme: Royal Borough of Greenwich and London Boroughs of Newham and Tower Hamlets.
- 4.5 The Mayor's Transport Strategy (MTS) is also a document constituting a significant material consideration in this context.
- 4.6 The Planning Policy Compliance Statement (Document Reference 7.2) shows how the scheme complies with the development plan and the MTS.

5 Details of the Borough and local issues

The Borough

- 5.1 Bexley is an outer London borough situated at the heart of the Thames Gateway (London) sub-region in south-east London and covers an area of about 64 square kilometres or 6,400 hectares.

- 5.2 Bexley's location on the A2 and A20 corridors makes it a gateway to London from the Channel Ports of Dover and Ramsgate and the Channel Tunnel, via the M2/A2 and M20/A20. There is also good access to Stansted, Gatwick, Heathrow and London City Airports, and Ebbsfleet International station is just a few miles away.
- 5.3 The nearest Thames crossings are the Woolwich Ferry, Blackwall Tunnel and Dartford Crossing.
- 5.4 The London Borough of Bexley is an 'A' Local Authority in respect of section 43 of the Planning Act 2008. It is also the highway and traffic authority for roads in the borough, except in relation to GLA roads and is subject to a Network Management Duty under the Traffic Management Act 2004.
- 5.5 The London Plan identifies Bexley Riverside Opportunity Area, in the north of the Borough and Thamesmead and Abbey Wood Opportunity Area straddling Bexley and the Royal Borough of Greenwich, as having the potential combined capacity to accommodate a minimum of 7,000 new homes and 11,000 new jobs.
- 5.6 Both Opportunity Areas (OA's) form significant and intrinsic parts of Bexley's emerging Growth Strategy which is focusing on higher growth figures than those in the London Plan.
- 5.7 The main roads in Bexley comprise the A2 (London-Dover road) that runs east-west through the middle of the borough, and the A20 which runs along the southern border of the borough. Both roads connect the area with the M25, and are part of the Transport for London Road Network (TLRN).
- 5.8 There is no TLRN within the Bexley Riverside OA but the area is served by three important roads, the A2016 between Erith and Thamesmead, the A206 (Woolwich Road), and the A2041 Harrow Manor Way between Thamesmead and Abbey Wood station.

Local Issues

- 5.9 The A2 is at or near capacity for extended peak hours, which leads to drivers using local roads as alternative routes. The A2 carries as much as 100,000 vehicles per day, of which 4,500 per hour are in the evening peak period.
- 5.10 The A2016 Bronze Age Way – A206 Queens Road – Northend Road – Thames Road is a key route running through the north of the borough and experiences significant congestion during peak times.
- 5.11 Proposed developments in the north of the Borough, and the Kent Thameside area, could potentially result in further delays and congestion. This situation has been improved after the completion of the Thames Road Improvement project, although there is still a pinch point at the Cray Mill railway bridge that carries the North Kent Line. Further improvements to this route will be required to meet the increasing demand as new developments come forward.

6 Assessment of Impacts on the Borough

- 6.1 The impacts on the Borough associated with the proposed scheme as summarised in the table set out in Appendix 1 of this Local Impact Report.

7 DCO Requirements

7.1 The Council makes the following comments on the Draft Development Consent Order:

Part 5 – User Charging

- 52 (2) ... the recommendations of STIG also need to be considered
- 56 (e) ... The Council believes that the surplus should not go into TfL's general fund but should be used to develop and deliver, in the first place, a Belvedere Crossing and then other transport schemes in east and south east London.

Part 6 – Miscellaneous & General

- 65 (7) (c) ... The Council believes it should be “two representatives from the other bodies”

8 Summary and Conclusions

8.1 Compared to the host Boroughs, generally, the impacts on the London Borough of Bexley, as a result of the implementation of this scheme, can be regarded as being slight.

8.2 However, the full extent and magnitude of the impacts on the Borough may only be known once the further modelling and assessment work has been undertaken nearer to the opening date.

D. Freestone
London Borough of Bexley
14 November 2016

Appendix 1 – Impacts on the Borough

Category	Details of Impact	Type of Impact
Air Quality and Emissions	Although increases in PM peak hour traffic is predicted along the A2 corridor following the opening of the tunnel, these increases do not meet the thresholds required for a full assessment of air quality and emissions within the Borough. TfL describe any impact for Bexley as being negligible. The conclusion is that there may be no change or a Slight Negative Impact during the PM peak in the close vicinity of the A2.	Neutral/Slight Negative
Biodiversity	No impact	Neutral
Flooding	No impact	Neutral
Heritage	No impact	Neutral
Land use including open space	No impact	Neutral
Noise and vibration	Although increases in PM peak hour traffic is predicted along the A2 corridor following the opening of the tunnel, these increases do not meet the thresholds required for a full assessment of noise and vibration within the Borough. TfL describe any impact for Bexley as being negligible and any increase in noise as being would be imperceptible to the majority of the population. The conclusion is that there may be no change or a Slight Negative Impact during the PM peak in the close vicinity of the A2.	Neutral/Slight Negative
Socio-economic	<p>1. Impacts on Bexley's Residents</p> <p>Data from the 2011 census suggests that 5.75% of Bexley's employed residents travelled to the borough from Tower Hamlets, Newham and Hackney for work:</p>	

Borough	Bexley residents working in borough	% Employed Bexley residents
Newham	846	0.94
Tower Hamlets	3,656	4.07
Hackney	657	0.73

Considering the 11 boroughs making up north-east and north-central London, 23.34% of Bexley's employed residents travelled to these areas for work:

Borough	Bexley residents working in borough	% Employed Bexley residents
Newham	846	0.94
Tower Hamlets	3,656	4.07
Hackney	657	0.73
Havering	358	0.40
Barking and Dagenham	323	0.36
Redbridge	142	0.16
Waltham Forest	241	0.27
Enfield	175	0.19
Haringey	135	0.15
Islington	1,432	1.60
Westminster, City of London	12,986	14.47

Positive impacts:

Data from the Business Register and Employment Survey 2015 shows that percentage employment growth between 2010 and 2015 was significantly higher in Newham, Tower Hamlets and Hackney than in Bexley and across the London region.

The increased road capacity facilitated by the Silvertown tunnel will improve access to both existing employment opportunities in North / North-East London and the employment opportunities created through the significant regeneration of the Royal Docks and London Riverside opportunity areas as detailed in the Mayor London's City in the East master plan. It should also reduce journey times through the existing Blackwall

Positive

	<p>Tunnel, improving road-based commuting into Tower Hamlets and onwards towards central London (see section below on Transport and Traffic)</p> <p>The average 2015 median gross annual pay in Newham, Tower Hamlets and Hackney was 49% higher than the average median gross annual pay in Bexley (source: Annual Survey of Hours and Earnings – Workplace Analysis). Improved access to labour market opportunities in these boroughs will resultantly have the potential to increase the economic prosperity of Bexley residents.</p> <p>Data from the 2011 census shows that 44.7% of Bexley's employed residents travelled to work as a driver of a car or van, increasing to 47.7% including those who travel as a passenger in a car or van. Increased road capacity resulting from the Silvertown tunnel has the potential to improve journey times for those commuting to the north of the Thames and lessen the impact from incidents at the Blackwall Tunnel.</p> <p>Negative impacts: The introduction of charges at the tunnels could affect the financial viability of continuing employment for Bexley residents working in North / North-East London in lower-paying roles who use their own vehicle to commute to work. This could have a resultant negative impact on Bexley's employment rate with most impact seen on those already in a low-income position, risking the economic prosperity of financially vulnerable residents. Data from the Business Register and Employment Survey 2015 shows that employment growth in Bexley between 2010 and 2015 was strongest in the higher-skill requiring professional, real estate, scientific and technical sector. There is a risk that low-skilled residents unable to account for charges introduced at the tunnels may face a significant challenge in securing employment in Bexley should this trend continue.</p> <p>While the Silvertown Tunnel Social Impacts Appraisal, published in April 2016, concludes that there will be a large beneficial outcome for low income public transport users, 2011 Census data suggests that just 8.7% of Bexley's employed residents travelled to work by bus, minibus or coach. This suggests that few of the 5.75% of Bexley's workers who travel to Newham, Tower Hamlets and Hackney for work would do so by a means</p>	<p>Negative</p>
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	<p>where this large beneficial outcome would be felt.</p> <p>Increased access to employment opportunities in North / North-East London could encourage more higher-skilled Bexley residents to take up employment in those boroughs, particularly as gross median annual pay values are comparatively higher in the North / North-East boroughs. This may make it more challenging for Bexley employers to recruit skilled staff without increasing pay to competitive levels, discouraging inward investment.</p> <p>Hackney, Tower Hamlets and Newham had the 9th, 10th and 22nd highest mean monthly private rental rates out of 33 London boroughs (including City of London) in the 12 months to March 2016, with percentage growth rates ranked 9th, 6th and 2nd respectively compared to the 12 months to March 2015 (source: Valuation Office Agency Private Rental Market Statistics). Comparatively, Bexley's mean monthly private rental rate in the 12 months to March 2016 made it the second most affordable borough in London. The increased road capacity facilitated by the Silvertown tunnel could accelerate demand for housing in Bexley as the balance between property affordability and sufficient access to employment shifts. This has the potential to accelerate property costs in Bexley, displacing existing Bexley residents whose income would no longer afford them to live in the borough.</p> <p>Data from the 2011 census shows that 44.7% of Bexley's employed residents travelled to work as a driver of a car or van. Improved access to the north of the Thames may encourage more employed residents to commute via these means, increasing pressure on the road infrastructure that could negatively impact the ability for residents and workers of, and businesses in, the borough to move around as required.</p> <p>2. Impacts on Bexley's Workers</p> <p>Data from the 2011 census suggests that 1.15% of Bexley's workers travelled to the borough from Tower Hamlets, Newham and Hackney:</p>	
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Borough	Workers from borough	% Bexley workers
Newham	319	0.58
Tower Hamlets	215	0.39
Hackney	91	0.17

Considering the 11 boroughs making up north-east and north-central London, 2.99% of Bexley’s workers travelled from these areas:

Borough	Workers from borough	% Bexley workers
Newham	319	0.58
Tower Hamlets	215	0.39
Hackney	91	0.17
Havering	415	0.76
Barking and Dagenham	155	0.28
Redbridge	116	0.28
Waltham Forest	100	0.21
Enfield	74	0.14
Haringey	62	0.11
Islington	51	0.09
Westminster, City of London	36	0.07

Positive impacts:

The increased road capacity facilitated by the Silvertown tunnel will improve access to employment opportunities in Bexley for those living north of the Thames. This could enable Bexley employers to more readily recruit into their opportunities, supporting business growth and encouraging inward investment.

Improved journey times through the existing Blackwall Tunnel could make Bexley more attractive as an employment destination for those living in central London, further widening the pool of potential workers for Bexley businesses.

Positive

	<p>Negative impacts: The 2015 median gross annual pay in Bexley was 33% lower than the average median gross annual pay in Newham, Tower Hamlets and Hackney (source: Annual Survey of Hours and Earnings – Workplace Analysis). The introduction of charges at the tunnels could affect the financial viability of taking up or continuing in employment in Bexley resulting in a small level of job-loss in the borough.</p> <p>3. Impacts on Bexley’s Businesses</p> <p>Positive impacts: Data from the Business Register and Employment Survey 2015 shows that employment in Bexley’s transportation and storage industry fell by 6.8% between 2014 and 2015. The increased road capacity facilitated by the Silvertown tunnel, along with the comparative affordability of Bexley land, could support inward investment and encourage businesses to establish a base in the borough, increasing local employment opportunities and help Bexley return its transport and storage industry to positive employment growth.</p> <p>Negative impacts: 85% of Bexley’s local units in the transportation and storage industry are micro-sized (0 to 9 employees). The introduction of charges at the tunnels could affect the financial viability of Bexley businesses engaging with or developing a customer-base north of the Thames, with increased costs putting these businesses and their related employment at risk.</p> <p>17% of Bexley’s large local units (250 or more employees) are in the transport and storage industry. The introduction of charges at the tunnels will increase costs that could need to be offset by a reduction in employee numbers, or in increased costs to business customers who may then seek alternative suppliers leading to loss of income to Bexley businesses. Data from the 2011 censuses suggests that 2.99% of Bexley’s workers travel to the borough from North of the Thames. The introduction of charges at the existing Blackwall Tunnel and the new Silvertown tunnel could result in</p>	<p>Negative</p> <p>Positive</p> <p>Negative</p>
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	<p>employees being unable to afford to travel to work unless businesses increase pay rates to compensate for the additional costs. This could result in employment loss for Bexley businesses and / or increased staffing costs.</p>	
<p>Transport and Traffic</p>	<p>The following comments are based on the Transport Assessment and its appendices (document 6.5).</p> <p>It is noted that the opening of the proposed tunnel will increase capacity enabling more traffic to flow during the peak hours, whilst, according to the modelling, not increasing the overall daily traffic flows.</p> <p>Therefore, as a result, there will be increases in peak hour traffic flows on the approach routes including the A2 between the tunnel and junction 2 of the M25 which passes through the borough of Bexley.</p> <p>Figures 5.7 and 5.9 indicate increases in traffic from the 2012 Base to the 2021 Reference Case during the peak hours along the A2 and other routes within the Borough. During the PM peak these increases are 500+ PCU/hr along the A2 and generally 100-200 PCU/hr (peaking at 200-500 PCU/hr at some locations) along other routes in the Borough.</p> <p>Figure 5.13 indicates the change in Volume/Capacity ratio (VCR) from the 2012 Base to the 2021 Reference Case.</p> <p>A further Figure indicating the actual VCR for the PM Reference Case would have been useful to assess the operational performance of the network.</p> <p>Negative Impacts: The opening of the tunnel will introduce further increases in Peak traffic flows. The PM peak will see the highest increases affecting the Borough and these will be along the A2 as indicated on Figure 7.23. West of the Borough the increase will be 200+ PCU/hr reducing to 100-200 PCU/hr east of the Borough up to Junction 2 of the M25.</p> <p>Figure 7.25 indicates changes in Volume/Capacity ratio (VCR) following the</p>	<p>Slight Negative</p>

	<p>opening of the tunnel for the PM peak. The modelling does not show any increase in VCR along the section of the A2 through the Borough and to the east, despite the modelled increase in the traffic flows. An increase in VCR is indicated on the section of the A2 to the west of the Borough.</p> <p>A further Figure indicating the actual VCR for the PM Assessed Case would have been useful to assess the operational performance of the network.</p> <p>Positive Impacts: Table 7.4 sets out the predicted changes in journey times for the AM peak comparing the Assessed Case with the Reference Case. This indicates no change in journey times from Bexley to Boroughs south of the Thames and reductions of up to 17 minutes from Bexley to Boroughs north of the Thames. Journey times from the Boroughs south of the Thames to Bexley generally are not changed. However, journeys from Boroughs north of the Thames are reduced by up to 4 minutes.</p> <p>Table 7.6 covers the PM peak and indicates an increase of 1 minute for journeys from Bexley to Boroughs south of the Thames and reductions of up to 15 minutes from Bexley to Boroughs north of the Thames. Journey times from Boroughs south of the Thames to Bexley are increased by up to 2 minutes. However, journeys from Boroughs north of the Thames are reduced by up to 21 minutes. Unfortunately the table does not indicate journey times from Bexley along the A2 to the east towards the M25 where the modelling does indicate an increase in traffic flows.</p>	Positive
Further Impacts	<p>The Council notes that further modelling and assessment work will be undertaken closer to the opening date of the tunnel using up to date information including traffic flows, economic data, proposed charging levels and growth data. This work may identify additional impacts on the Borough.</p> <p>The revised modelling may identify further necessary mitigation works.</p> <p>In addition, the charging levels may impact upon traffic flows in the</p>	Unknown until further modelling/assessment work is undertaken nearer to the opening date

	<p>Borough depending on the economic climate at that time. The charges may result in increased use of the Dartford crossing which is geographically more local to Bexley. Resultant traffic increases, particularly in the event of incidents, could negatively affect two of Bexley's main northern thoroughfares (the A206 and A2) impacting residents, workers and businesses. The levels of charges could also result in the increased use of the Woolwich Ferry that currently does not charge a crossing fee. This has the potential to cause significant traffic affecting Woolwich and the surrounding areas, including the A2016 access road from Bexley into Greenwich. Not only would this disrupt workers travelling into Bexley through North Greenwich and Bexley residents travelling to work through North Greenwich, but could also disrupt the business activity of several significant Bexley businesses in the transport and storage industry who are based along the A2016 road. This may result in businesses seeking to relocate outside of the borough to a more readily accessible location and result in business and employment loss.</p> <p>The A206 and the A2016 will be the main bearers of road transport in the regeneration of the Bexley Riverside Opportunity Area. A negative effect on the ability to use these roads could also have significant impact on Bexley's ability to effectively regenerate the surrounding area and achieve resultant economic growth that would support residents and businesses in the borough.</p>	
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D. Freestone
 London Borough of Bexley
 14 November 2016