Programmes and Investment Committee

Date: 3 July 2018



Item: Silvertown Tunnel

This paper will be considered in public

1 Summary

1001/ST-PJ482C Silvertown Tunnel					
	Existing Financial Authority	Estimated Final Cost (EFC)	Existing Programme and Project Authority	Additional Authority Requested	Total Authority
TfL direct costs	£153.2m	£201.1m*	£50.5m*	£14.5m	£65.0m

Notes:

*EFC comprises £196.4m of TfL cost (including £69.3m to be financed by the DBFOM contractor) and £4.7m of cost previously incurred by City Planning and included within both the project EFC and Authority request.

Authority Approval: This paper seeks to update the Committee on the project and the process to enter into a Project Agreement with a private sector partner to Design, Build, Finance and Operate/Maintain (DBFOM) the Silvertown Tunnel. The Committee is asked to approve the additional authority requested, note the paper and the intention to return to the Committee later this year for approval to award the Project Agreement.

Outputs and Schedule: The Silvertown Tunnel, which is currently forecast to open in 2024, will provide a new Thames crossing connecting the A102 Blackwall Tunnel Approach to the south with the A1020 Lower Lea Crossing to the north. The scheme is designed to relieve congestion at Blackwall Tunnel and improve network reliability and resilience, as well as enabling a step change in the provision of cross-river buses services to support planned economic growth in east and south-east London.

1.1 A paper containing exempt information is included on Part 2 of the agenda. The information is exempt by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business affairs of TfL. Any discussion of that exempt information must take place after the press and public have been excluded from this meeting.

2 Recommendation

- 2.1 The Committee is asked to note the paper and the related paper on Part 2 of the agenda and:
 - (a) approve the increase in Programme and Project Authority from £50.5m to £65.0m to continue the project over the coming year, including the procurement process; and
 - (b) note the continuation of the procurement process and the intention to return to the Committee later this year seeking authority to award the Project Agreement.

3 Background

- 3.1 The Silvertown Tunnel project has been developed to address the significant issues of traffic congestion and unreliability at the Blackwall Tunnel and the consequential effects these have on travel, the environment, the economy and growth across the wider east and south east London area. The main issues are:
 - (a) the Blackwall Tunnel is one of the most severely congested roads in London. In the peak periods, queues routinely stretch back up to two miles, adding around 20 minutes to journey times (it is estimated that some one million hours are wasted each year in queuing for the Blackwall Tunnel, equating to an equivalent cost of c.£10m of people's time);
 - (b) journey times for trips through the tunnel are more unpredictable than anywhere else on the Transport for London Road Network (TLRN), and despite ongoing efforts, each year there are around 1,000 closures (far more than on comparable tunnels, even accounting for its heavy usage). Many of these closures have significant ramifications for the performance of the wider road network across east and south east London;
 - (c) in the event of prolonged closures, rerouted drivers are forced to distant crossing points, which are themselves lacking in capacity, often along unsuitable routes, causing widespread disruption;
 - (d) the current restricted height clearances in the northbound Blackwall Tunnel and the unreliable journey times mean that only one single decker bus service, the 108, is available for cross river bus connections between east and south east London; and
 - (e) the area surrounding the Blackwall Tunnel is subject to enormous change with major employment and population growth taking place across the Isle of Dogs, Royal Docks, Greenwich Peninsula and Lea Valley. At present the Blackwall Tunnel provides the only strategic crossing of the river by road that serves these development areas (due to the physical and design restrictions on the Rotherhithe Tunnel and Woolwich Ferry). With the scale of growth taking place, there will be increasing pressure placed on the Blackwall Tunnel, which will exacerbate the issues identified above.
- 3.2 Due to the significance of London as an economic driver nationally, this decrease in the efficiency of London's transport system can reasonably be expected to have a consequential detrimental impact nationally.

- 3.3 The Silvertown Tunnel project would:
 - (a) significantly contribute to eliminating congestion at the Blackwall Tunnel;
 - (b) significantly reduce the number of unplanned closures at Blackwall, in particular closures caused by vehicles which are too tall for the tunnel;
 - (c) ensure the cross river road network is more resilient to incidents at Blackwall by providing a nearby alternative route;
 - (d) enable the provision of new cross river bus links, transforming bus services and significantly increasing the proportion of cross river trips made by public transport (details of the indicative future bus network are provided in Appendix 1);
 - (e) reduce the environmental impact of current traffic congestion on some of London's most polluted roads; and
 - (f) support population and economic growth by enabling more reliable journeys, improving access to new markets and new homes and keeping traffic moving in east and south east London.
- 3.4 The scheme consists of a twin bore road tunnel providing a new connection between the Greenwich Peninsula and the Royal Docks. There would be two traffic lanes in each direction with one lane reserved for buses, coaches and Heavy Goods Vehicles. New junctions will be constructed to link the tunnels into the existing road network and new portal buildings to house the equipment necessary to operate the tunnels. A plan showing the location of the scheme and indicative visuals are provided as Appendix 2.
- 3.5 To ensure that traffic levels are managed and that the benefits of the scheme are secured for the long term, a user charge is proposed at both the Silvertown and Blackwall tunnels. The user charge will also help pay for the new tunnel.
- 3.6 The Secretary of State for Transport designated the scheme a Nationally Significant Infrastructure Project in 2012. On 10 May 2018, TfL was granted a Development Consent Order (DCO) by the Department for Transport (DfT) to deliver the Silvertown Tunnel. It came into force on 31 May 2018.
- 3.7 The Mayor has also confirmed support for the scheme and the new Mayor's Transport Strategy (MTS) specifically references delivery of the new crossing in a number of its proposals. Silvertown contributes to the objectives of the strategy by providing a step-change in cross-river bus connectivity and addressing the problems of traffic congestion and associated air pollution, frequent closures and consequential delays, and the lack of network resilience and reliability at the Blackwall Crossing. Proposal 93 of the MTS states:

"The Mayor, through TfL, will continue to support the construction and operation of the Silvertown Tunnel, together with the introduction of user charges on the Blackwall and Silvertown tunnels (once the latter is opened), to address the problems of traffic congestion and associated air pollution, frequent closures and consequential delays, and the lack of network resilience and reliability at the Blackwall Crossing."

4 Business Case

- 4.1 An outline business case for the scheme has been produced in accordance with the DfT's Business Case Guidance, as required for nationally significant infrastructure projects. The DfT Guidance stipulates a five case model to developing a transport business case which considers whether the scheme:
 - (a) is supported by a robust case for change that fits with the wider public policy objectives the 'strategic case':
 - (b) demonstrates value for money the 'economic case':
 - (c) is commercially viable the 'commercial case':
 - (d) is financially affordable the 'financial case': and
 - (e) is achievable the 'management case'.
- 4.2 The business case shows that the project represents the best solution for addressing the current problems at Blackwall and the adverse effects these have on the economy and local environment. The project also helps support new cross river bus travel and future sustainable growth. The case for the scheme is summarised in the table below.

DfT Business Case Requirement	Summary of Silvertown Tunnel Outline Business Case (OBC)
The strategic case	There is a clear and robust case for a new tunnel at Silvertown to address the current traffic congestion and unreliability and to cater for the needs of future economic growth. The 'strategic case' is closely aligned with national, London-wide and local policy objectives, with a particular reference to the London Plan and Mayor's Transport Strategy (2010 and 2018).
The economic case	The economic benefits of the scheme are valued at a Net Present Value (NPV) of £967m to £1,225m (the latter when reliability benefits are included). These values increase significantly if London values of time are used in the appraisal with the benefits rising by some £600m to £700m to £1,567m to £1,925m (the latter for the adjusted estimates). This represents a very good economic outcome and very high value for money.
The commercial case	The scheme is commercially viable. The Outline Business Case sets out the procurement and commercial structure including the proposed allocation of risk and payment mechanisms for the project.
The financial case	The scheme is financially affordable. The majority of the project would be delivered through a Design, Build, Finance, Operate and Maintain (DBFOM) contract, with the finance repaid during the operating period of the DBFOM concession and the user charging income offsetting the majority of these costs.

The management case		
	governance, process and project controls in place for the next stages of development of the scheme.	

5 Equality and Diversity

- 5.1 A Health and Equalities Impact Assessment has been undertaken for the scheme, which was submitted as part of the DCO application. This includes an assessment of the impacts of the Scheme on health and equalities including air quality, noise, road safety, active travel, accessibility, access to jobs, social capital and other matters. In summary, the assessment concludes that there are no significant cumulative effects on health, well being and equalities arising during the scheme construction or operation and that appropriate mitigation has been incorporated into the scheme where required. For example, TfL has committed that any new buses using the Silvertown Tunnel will be Euro VI or equivalent.
- 5.2 The Project Agreement has been updated to reflect the publication of the most recent GLA Group Responsible Procurement Policy and the publication of the Transport Infrastructure Skills Strategy (TISS).

6 The DCO – Amendments to the Order

- 6.1 The DCO process is used to provide the necessary consent for projects which have been classified as nationally significant. This means that separate applications for a range of other consents, such as planning permission and listed building consent are not required. The DCO also includes provisions authorising the compulsory acquisition of land or of interests in or rights over land and the introduction of user charging at the Silvertown Tunnel and Blackwall Tunnel.
- 6.2 The DCO was made with a number of modifications to the draft order. These are discussed in the paper on Part 2 of the agenda.
- 6.3 The application documents and agreement are available publicly at:

https://infrastructure.planninginspectorate.gov.uk/projects/london/silvertown-tunnel/

7 Procurement

- 7.1 The main Silvertown Tunnel works will be delivered through an agreement with a private sector special purpose company (Project Co) who will be responsible for raising the finance, designing, building and maintaining the Silvertown Tunnel including the operation of associated equipment for a 25 year period post-construction. We will be responsible for delivering and operating the user charging, which will also apply at the Blackwall Tunnel. We will therefore retain the demand risk in respect of user charging income, whilst the construction, maintenance and availability risks for the Silvertown Tunnel will generally be passed to the Project Co.
- 7.2 The Project Agreement is generally based on PF2, the Standardisation of PFI Contracts, as issued by HM Treasury in December 2012. The key exceptions are either required to achieve the necessary accounting treatment in accordance with

the Eurostat guidance or address issues that are unique to the Silvertown project. We plan to append a summary of the terms of the Project Agreement for the next PIC paper

- 7.3 Under the terms of the Project Agreement, payments to the Project Co will only commence once the tunnel is complete, thereby ensuring there is a very strong incentive for the Project Co to deliver to time (or early) and budget. The proposed payment mechanism also contains strong incentives to maximise asset availability when it matters most, which not only reduces inconvenience for users but also minimises the impact of lost revenue on TfL and ensures the Project Co adopts a whole life approach in the design.
- 7.4 The procurement process has been run in parallel with the DCO. This has helped ensure the benefits of the Silvertown Tunnel are realised as early as practicable, as well as minimising cost increases due to inflation and enabling the land required for construction of the tunnel to be released without delay once the works are complete. Key steps in the procurement process to date have included:
 - (a) March 2016: Issue of Prior Information Notice
 - (b) October 2016: Issue Pre-Qualification Questionnaire (PQQ)
 - (c) December 2016: Receipt of PQQ submissions from seven bidding consortia
 - (d) March 2017: Shortlisting to three bidders
 - (e) June 2017: Launch of Invitation to Negotiate
- 7.5 Since June 2017 we have been in a negotiated process where we have been discussing the proposed agreement with the three tenderers, alongside their proposals for the scheme. Further information is provided in the paper on Part 2 of the agenda on issues raised during the process which are subject to ongoing commercial negotiation.
- 7.6 In March 2018 the Skanska Strabag consortia pulled out citing strategic business reasons and the process has continued with the remaining two bidders; Hochtief PPP Solutions GmbH and Cintra Global Limited.
- 7.7 The current planned next steps for the procurement process include:
 - (a) July 2018: first submission of technical proposals for evaluation
 - (b) January 2019: final technical, commercial and financial submissions submitted for evaluation
 - (c) May 2019: preferred bidder announcement
 - (d) July 2019: execution of the Project Agreement.

The Committee is asked to approve the increase in Programme and Project Authority from £50.5m to £65.0m to continue the project over the coming year, including the procurement process. It is then intended to return to the Committee in 2019 for further authority following tender submissions, prior to entering into the 25 year Project Agreement as described in the paper on Part 2 of the agenda.

8 Key milestones

8.1 The key milestones for the project are set out in the table below with further information provided in Appendix 3.

Milestone	Target Date
Announce preferred bidder	May 2019
Execution of Project Agreement	July 2019
Silvertown Tunnel opening	2024 (based on TfL's programme)

9 Assurance

9.1 The project has recently been the subject of an Integrated Assurance Review (IAR) by TfL Project Assurance and the Independent Investment Programme Advisory Group (IIPAG). This review did not identify any critical issues and the recommendations have been accepted as detailed in the management response.

List of appendices to this paper:

Appendix 1: Silvertown Indicative Future Cross River Bus Network Appendix 2: Proposed Layout and Illustrative Plans for the Silvertown Tunnel Appendix 3: Key Project Dates

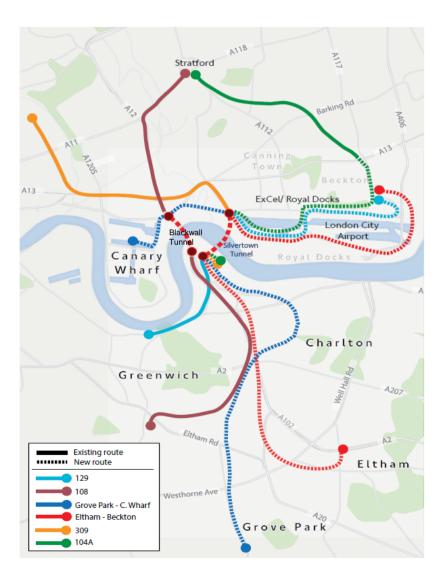
Exempt supplemental information is contained in a paper on Part 2 of the agenda

List of background papers:

Mayor's Transport Strategy (2018) Letter to Mayor of London from the SoS confirming Silvertown Tunnel's status as a nationally significant infrastructure project Outline business case Procurement strategy IIPAG and PMO Reports and the Management Response

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- Service frequency increase from the current 6 buses per hour via the Blackwall Tunnel to an assessed 37.5 buses per hour per direction
- A projected increase from 10% to 30% for proportion of trips made by public transport using Blackwall / Silvertown crossings
- Increased public transport accessibility for key development sites, such as the Royal Docks, Isle of Dogs and Greenwich Peninsula.



Appendix 2: Proposed Layout and Illustrative Plans for the Silvertown Tunnel

Plan showing the proposed Silvertown Tunnel



Illustrative design for southern tunnel portal



Urban realm proposals looking south west towards tunnel portal across Tidal Basin Roundabout

Appendix 3: Key Project Dates

