

Meeting Title:	Silvertown Tunnel Implementation Group – no. 08
Date & Time:	23 February 2023, 0930-1130
Location:	Virtual meeting hosted on MS Teams

1. Introductions and welcome

Attendees were welcomed to the eighth meeting of the Silvertown Tunnel Implementation Group (STIG). **Andrew Lunt** (AL) noted strong attendance of TfL colleagues reflecting the huge amount of work going on behind the scenes of these meetings. **Attendees (32no.)**.

Organisation	Attendee	Organisation	Attendee
TfL	Andrew Lunt	Jacobs	Elena Golovenko
TfL	Kelly Lamb	Jacobs	Jonathan Hale
TfL	Chris Frost	Aecom	Anna Savage
TfL	Mason Moss	Bexley	David Freestone
TfL	Jack Ross	Bexley	Lucy Foreman
TfL	Rebekah Murray	Greenwich	Ryan Bunce
TfL	Kevin Pritchard	Greenwich	Bob Bennett
TfL	Maresa Donagh	Hackney	Tyler Linton
TfL	Nick Stockman	Lewisham	Michelle Hope
TfL	Seren Dussuyer	Newham	Murray Woodburn
TfL	Charles Freeman	Redbridge	Rogan Keown
TfL	Daniel Hornshaw	Southwark	Tim Long
TfL	Alexander Clewes	Tower Hamlets	Robert Morton
TfL	David Korzeniowski	Waltham Forest	Jack Owen
TfL	Mamusu Komon	GLA	Sam Barnard
TfL	Susie Brown	National Highways	Whitney Gee

Apologies:

Organisation	Attendee	Organisation	Attendee
TfL	Helen Wright	Bromley	Angus Culverwell
TfL	Matthew Yates	Barking & Dagenham	John Hunter
TfL	Chris Lynch	Barking & Dagenham	Lucy Foreman
TfL	Laura Georgescu	City of London	Bruce McVean
		Newham	Nick Marks

2. Review of actions from previous meeting

Chris Frost (CF) reviewed the list of actions from the previous meeting (03 Nov 2022). Several including Health & Safety will be covered in the main body of the meeting.

It was not clear if item 10 had been completed. AL requested it be addressed in the Air Quality report presentation.

3. Diversity & Inclusion

AL requested attendees raise any relevant D&I updates. **Kelly Lamb** (KL) highlighted the recent Baroness Kennedy report investigating sexual harassment allegations within the TSSA Union. The report highlights the continuing discrimination experienced by women and racial minorities and illustrates that outdated views and practices are still evident within organisations that should be leading the way on these issues.

ACTION 01: Share report in minutes [Baroness Kennedy Report Feb 2023](#)

4. Safety, Health and Environment

Members were invited to provide any updates on safety, health and environment (SHE) related matters.

For awareness, KL reported that a new pattern of thefts has been emerging regarding the attempted thefts of surveying equipment. Working with Berkley Homes and other developers it has been noted across the industry that there has been an evolution in the tactics used in these thefts of highly specialist equipment. Vans are being used to closely tail vans holding the equipment into secure sites. The second van pretending to be part of the crew.

Murray Woodburn (MW) commented that this is highly relevant to Newham where a recent theft of high-value surveying equipment occurred on the North Woolwich Road. MW also noted that this is highly specialist equipment, and we should consider what market exists for such equipment.

ACTION 02: AL requested TfL project team put RLX security team in touch with Newham to share security learning.

5. Project update

AL noted HW apologies and gave the construction progress update. Good progress is being made with the Tunnel Boring Machine having now completed the first tunnel and had a successful 'breakthrough' to the rotation chamber in Greenwich on 15 February. From here it will be rotated and then continue tunnelling the second bore which will take three-four months, completing in autumn 2023.

AL outlined other completions on site including heavy civils works, piling for cut and cover, decked carpark and the A102 attenuation tank. The new replacement Boord Street foot and cycle bridge will soon be installed requiring roadworks on the A102 and local boroughs and other stakeholders will receive communications to assist in managing the impact of the closures.

An updated STIG progress report was circulated as part of the papers for the meeting and has been uploaded to the TfL STIG webpage.

6. Health and Safety

Kevin Pritchard (KP) outlined recent security issues since the last meeting. RLX has responded to a series of thefts by appointing a security guard and dog to accompany surveyors. For the protection of both the engineers and the equipment.

Overall H&S performance on-site is improving but the accident frequency rate remains 0.208 which is relatively high – in the next period it is forecast to reduce to 0.124 with continued good performance. During the TBM drive zero injuries were reported.

A recent HSE visit identified an Intervention Notice and noted People Plant Interfaces as an area for improvement. RLX carried out all recommended actions within one week of the notice. Offering 'Behavioral training' to encourage those on site to make the right decisions.

MW asked what TfL is typically targeting in terms of accident frequency rate. KP advised that TfL is striving for zero accidents but that a range from 0.08 – 0.1 would represent good performance in terms of a typical TfL frequency rate.

KP described an event involving a tremie pipe that occurred on 17 November 2022. It was a RIDDOR reportable incident where a 23m length of pipe fell into the southbound A102 from the Silvertown site. The 1.75 tonne pipe became disconnected, struck hoarding and broke into several smaller pieces before falling into the carriageway making contact with two vehicles. There were no injuries, the A102 was closed for five hours, opening at 05:00. Nationally, our contractors paused all similar activities while the situation was reviewed. HSE visited the next day and included specialist teams. The investigation with the manufacturer is ongoing. A hot debrief the following day acknowledged that at a different time of day the incident could have been much more serious. A new method of working has been implemented.

7. Traffic Modelling update (TfL/ Jacobs)

Daniel Hornshaw (DH) introduced colleague Alexander Clewes (AC) to present the Jacobs work on traffic modelling and overall approach to identifying mitigations for the scheme. The VISSIM microsimulation model will help assess the scheme's operational impacts and has been developed to be consistent with the principals in published TfL Modelling guidelines and Model Auditing Process. The scope of the modelling was presented. After development of the base model, two potential future scenarios have been explored; the Reference Case ('Future Base'); and Scheme Assessments ('Do Something'). Through comparison of these two future scenarios, a short-list of locations where highway mitigation measures may be beneficial has been produced.

In Scheme Assessment 04 (SA04), the shortlisted junctions will be tested in the LoHAM highway assignment model and then traffic flows and routes will feed through to the VISSIM model to assess the effectiveness of the potential mitigation measures to arrive at a recommended Scheme of Mitigation for submission to the Secretary of State (SoS).

Murray Woodburn (MW) commented that the modelling run mitigations would be entirely dependent on the level of the tunnel user charge and asked what type of sensitivities are involved? AL requested Jon Hale (JH) address the point within the presentation.

Ryan Bunce (RB) asked whether the level of the charge would reflect economic shifts, inflation, interest rate changes or other factors and commented that this is an area of interest to his stakeholders. Are these factors included in the modelling and will they translate to the real world? AL confirmed this was the case. JH advised that different user groups will be considered in the modelling and assessment.

JH described the tests undertaken to date on the user charge levels including further sensitivity tests that are planned and will be kept under review prior to finalising the charging regime in 2024. These sensitivity tests will give confidence that the required local highway mitigations are unlikely to change.

JH presented the Lot A transport modelling results from SA03 which is based on the 20 buses per hour (bph) cross-river network scenario recently consulted on. He thanked those boroughs that responded to the bus consultation. Junction mitigations are being prepared to be included in the SoS submission later in the year. He highlighted the modelling assessment definition slide in the slide deck that describes the various scheme assessments that have been or will be undertaken.

Some key changes between the recent SA and previous assessments were noted. Bus demand has increased by 500 to c9,000 with the B3 Option (20bph). Forecast cross-river bus occupancy has increased from 11 to 18 passengers per bus showing vehicles are being better utilised in the latest modelling. No major uplift in car driver and passenger trips. Private Hire Vehicles (PHVs) have seen a minor uplift.

In summary, SA03 was found to still deliver similar outcomes to those assessed at the time of the Development Consent Order (DCO).

Ryan Bunce (RB) welcomed the provision of detailed SA modelling figures and noted the modal shift from rail to bus. He requested further information on the locations where this mode shift occurs. EG agreed to provide this information and JH reminded the meeting that the data set is very large and we are only presenting the key outputs from our perspective. If any STIG members have specific areas of interest where they would like to see more detailed data, this can be requested.

ACTION 03: Elena Golovenko (EG) to provide RBG with modal shift locations.

JH outlined the engagement already underway with the boroughs and the two-step process in place where network mitigations will be recommended. The initial long-list of junctions (was shared with boroughs after the STIG meeting on 03 November). A total of 24 of those long-list locations triggered the secondary performance criteria in SA03, and Jacobs is now looking in-depth at a further short-list with the relevant boroughs with a view to capturing as many issues as possible before the Scheme of Mitigation is finalised.

Mitigations will range from signal timing changes to physical highway amendments starting with the lowest level of intervention. The focus is on identifying and resolving performance issues that are related to the tunnel impacts rather than solving every traffic issue in south-east London. Implications for cyclists, pedestrians and the people & place function are also being considered.

Based on recent VISSIM modelling work a total of three locations have been identified as requiring some physical highway amendments including: Bow Roundabout; Cotton Street / A13 / St Leonard's Road; and Preston's roundabout which includes some minor changes to the carriageway. A further slightly longer list of locations has been identified requiring only signal timing adjustments (see slide deck). Further review of the A206 corridor is an ongoing area of work. We will continue to engage with the relevant boroughs and a summary of all locations and mitigations will be provided in the Refreshed Assessment submission to the SoS.

Ryan Bunce (RB) noted he was pleased to see the A206 mentioned and enquired why it was not on the list shown. **JH (Jacobs)** replied saying it was not yet decided which list it should be included on – possibly both as it could require a combination of both physical and traffic signal change interventions, however this remains under investigation.

8. Air Quality modelling update (TfL/ AECOM)

Anna Savage (AS) of consultants Aecom (Lot B) provided an overview of work undertaken since the last meeting. The second annual baseline monitoring and modelling work is now finished with the new monitoring data awaiting ratification before the associated report is published by summer 2023.

In summer 2022 the monitoring data showed there were exceedances at three locations and the new data is showing a similar pattern. AS outlined that the SA03 work used Jacob's modelling outputs and assumed zero-emission buses. Most of the 245 receptors show below 40ug/m3.

It was also noted that there has been a recent ULEZ year 1 report on the inner London ULEZ expansion showing further improvements in air quality because of the scheme and other factors such as fleet improvements.

AS then provided an overview of the refreshed assessment work. Several areas were highlighted for discussion and maps shown in the slides to illustrate those areas exceeding air quality limits and those showing forecasted significant improvements in air quality when the tunnel opens. Air quality modelling results are similar to previous assessments in line with the traffic modelling work.

Final air quality and noise modelling will be undertaken in the coming months and will report in June.

Bob Bennett (RBG) asked whether PM2.5 could be discussed at the next Riverlinx CLG meeting.

SD explained TfL's approach to PM2.5 monitoring and AL noted SD had presented this directly to RBG members and officers. AL suggested further briefings could be provided to other STIG members if this was desired.

9. Local Highway Mitigations (TfL)

Chris Frost (TfL) covering for Chris Lynch (CL) shared the forward engagement plan for engaging with the boroughs. CF reminded STIG members of the SoS submission scope as defined at clauses (5) and (6) of Schedule 2 Requirement 7 of the DCO.

Meetings on the long-list and short-list of flagged locations potentially requiring some form of mitigation have been held with the RB Greenwich and LB Newham (21 February) and the next meeting with LB Tower Hamlets (LBTH) is scheduled for the 01 March. Further meetings are planned to discuss the short-list and AL requested further feedback from the boroughs to ensure we better understand local schemes.

Boroughs requested summaries of the information for onward briefing. AL asked the TfL team to consider how best to summarise the information for onward briefing.

10. User Charging Assessment Framework (Jacobs)

A dashboard is under development for scoring / identifying metrics from the huge amount of modelling data. The dashboard contains a variety of metrics for measuring performance against project objectives. A key request from the STIG boroughs is to identify any specific roads to be included in the dashboard.

AL reiterated the need for feedback from the boroughs on the approach to ensure all are comfortable with the approach to developing and deciding upon the opening year user charges as part of the associated consultation. In 2024, a final decision will be made on the user charge value for the opening of the scheme, still expected in 2025.

Murray Woodburn (MW) asked how the road user charge will work with SA04. AL responded that we had considered trying to set the charges now but felt there was significant benefit to doing this closer to the scheme opening date. This would allow further reflection on other road user charging (RUC) schemes in London and any other contextual information. TfL is aware of the need to confirm mitigations sooner but the sensitivity tests demonstrate this is viable. The aim is to slowly narrow down to an 'envelope' of charging sensitivities and mitigations based on the current modelling and testing. Timing is important in terms of other RUC initiatives and extensive work is being undertaken across the organisation around these questions and issues.

MW enquired whether this would drive the need for a further Scheme Assessment – SA05? AL asked for views from JH, but agreed this may be necessary, subject to how the charge is developed, any wider changes on the transport network, and the conclusions of further sensitivity tests.

Rogan Keown (RK) asked if the charge at Blackwall Tunnel will be the same as Silvertown Tunnel and further will this also be aligned with the charge at Dartford? AL confirmed that the charging proposals have not yet been agreed, and further work would follow in 2024, but confirmed that previous work considered both tunnels will be at the same rate, and higher than the charges at Dartford.

Ryan Bunce (RB) welcomed the dashboard approach and being able to add specific areas/ roads. He asked in what form the SoS submission this year will be made public and what evidence of borough scrutiny would be included.

<p>ACTION 04: TfL to further consider and agree with STIG members the appropriate level of detail to enable officers to brief members and scrutinise the draft SoS submission.</p>

ACTION 05: Upon receipt of the draft list of roads to be used in the dashboard, TfL and Jacobs request that STIG members review the list of locations that are being proposed regarding performance and propose any additional roads they would like to be considered for inclusion.

11. Bus Network Update

Mason Moss (MM) gave a brief update on the status of the recent cross-river bus network consultation. The Bus planning team is preparing responses to the issues raised and a final report will be released in late spring. The next steps will include bus tendering and an Invitation to Tender (ITT) will be sent out shortly after the final report is circulated. Beyond that we are also investigating infrastructure requirements and bus priority measures to support the new routes.

MW asked if the bus priority work will impact on the modelling. AL agreed it may have an impact on modelled road network performance and so asked the TfL team to ensure this is being considered with further modelling completed where required.

ACTION 06: TfL to ensure that modelling workstream remains aware of any emerging bus priority measures and potential impacts on the modelled performance of the network, with a view to undertaking any further modelling to ensure no material changes required and to keep STIG members briefed on any such developments.

12. Obligations and forward meeting planner

An updated obligations tracker was shared with STIG members as part of circulating the draft meeting minutes (see Appendix 01). TfL continues to monitor these DCO obligations by regularly ensuring that we are sharing all relevant information and data we need with STIG members via this, and other forums. The tracker provides evidence that TfL continues to follow the processes and policies set-out in the Monitoring and Mitigation Strategy, Bus Strategy, Charging Policy and Procedures, plus the relevant schedules in the DCO itself. As such it ensures that obligations are not missed and provides STIG members with assurance that we are meeting our MMS requirements.

The tracker will continue to be updated as the project progresses.

13. Next steps and AOB

The next STIG meeting will be held ahead of the SoS submission in May 2023. AL reiterated the offer to members to request further information on any topic, given the encouraged boroughs to follow up with any additional questions or input individually if required.

APPENDIX 01 – TfL COMBINED OBLIGATIONS TRACKER (MAR-2023)

Silvertown Tunnel - Combined Obligations Tracker

Work In Progress: This tracker is regularly updated & subject to change
v.15/03/2023

Category	STIG ref #	Year* Activity commences	Quarter* Activity commences	Doc	Doc ref	Activity	Requirement	Status	Updates
01 - STIG administration	1	2020	Q3	DCO	66 (1)	Establishment of STIG	TfL must establish and fund the reasonable secretarial and administrative costs of a consultative body to be known as the Silvertown Tunnel Implementation Group.	Completed	STIG now established
	2	2020	Q3	DCO	66 (7)	Frequency/timing of STIG meetings	Unless otherwise agreed by STIG, TfL must convene a meeting of STIG, chaired by a representative elected by the members of STIG, at least twice a year on a date to be determined by TfL, including on each occasion that TfL publishes a monitoring report in accordance with the monitoring and mitigation strategy.	Completed	Meeting 1: 16 Sep 2020 Meeting 2: 28 Jan 2021 Meeting 3: 27 May 2021 Meeting 4: 30 Sep 2021 Meeting 5: 27 Jan 2022
	3	2020	Q3	DCO	66(8)	First STIG meeting	The first meeting should be held no less than 3 years before the tunnel opens.	Completed	First STIG meeting held on 24/09/2020
	4	2020	Q3	DCO	66 (5)	STIG matters - need to consult STIG	TfL must consult the other members of STIG on the following matters relating to implementation of the authorised development :	Underway	
	5	2020	Q3	DCO	66 (5)	STIG matters - (a) monitoring	(a) the extent, nature and duration of monitoring to be implemented in accordance with the monitoring and mitigation strategy;	Underway	16/09/2020 - Paper on air quality monitoring proposals to be presented at STIG meeting on 16/09/2020 20/05/2021 - Papers on Socio economic and traffic monitoring proposals presented at STIG meeting on 27/05/2021 24/09/21 - Socio-economic surveys shared for comment with STIG members 20/08. Further traffic monitoring information to be shared at 30/09 STIG meeting
	6	2020	Q3	DCO	66 (5)	STIG matters - (b) bus services	(b) the proposals for the initial bus services that will operate through the tunnels when the Silvertown Tunnel opens for public use;	Underway	Working group meetings held with STIG members held on 20 Oct 2021, 11 May 2022, and 12 Oct 2022.
	7	2022	Q3	DCO	66 (5)	STIG matters - (c) monitoring reports	(c) the monitoring reports produced in accordance with the monitoring and mitigation strategy;	Underway	Air quality 2021 monitoring report uploaded to website Oct 22
	8	2020	Q3	DCO	66 (5)	STIG matters - (d) revisions to charging policy	(d) any proposed revisions to the charging policy under article 53 (the charging policy); and	Underway	
	9	2020	Q4	DCO	66 (5)	STIG matters - (e) user charges	(e) the level of charges required to be paid for use of the tunnels	Not started	
	10	2020	Q3	DCO	66 (6)	STIG recommendations / representations	In taking any decision in respect of any of the matters set out in paragraph (5), TfL must have regard to any recommendations or representations made by a member of STIG in response to the consultation carried out under that paragraph.	Underway	20/01/2021 - Process discussed at 28/01/21 STIG meeting
	11	2020	Q3	DCO	66 (10)	Publication of STIG material	TfL must publish on its website agendas, reports, minutes and other relevant documents relating to the operation of STIG as soon as reasonably practicable after they become available.	Underway	Link to website
02- Refreshed assessment / pre-opening mitigation	12	2023	Q1	DCO	Sch 2 Req 2	Agree E1m business transitional support package with councils	Prior to the opening of the authorised development for public use TfL must make all reasonable endeavours to agree a business transitional support package with the councils of the London Borough of Newham, the London Borough of Tower Hamlets and the Royal Borough of Greenwich. As part of this business transitional support package TfL must make available to those councils the sum of one million pounds for the purpose of supporting local businesses.	underway	
	13	2020	Q4	MMS	2.1.1	Develop refreshed assessment	Prior to the Silvertown Tunnel opening for public use, TfL must refresh its assessment of Scheme impacts, in order to: • Set the opening user charges; • Define the requirement for and form of localised mitigation for residual effects; and • Specify the bus network through the Silvertown Tunnel that will operate on opening.	Underway	28/01/21 - approach to strategic transport modelling for refreshed assessment presented to STIG 20/09/2021 - update on refreshed assessment to be presented and discussed at 30/09/21 STIG meeting 10/06/2022 - updates provided at 27 Jan 2022 with further update at 16 Jun 2022 meeting 10/11/2022 - traffic and air quality model updates provided at 3 Nov STIG 15/03/2023 - updates of RA modelling given at 23 Feb STIG meeting
	14	2020	Q3	MMS	2.1.2	Update the transport and environmental models	For this process TfL will update the relevant transport and environmental models, rerun those models, and develop its proposals for each element in conformity with the commitments, policies and procedures set out in the relevant certified documents and any DCO requirements. The assessment will incorporate a wider range of analyses than the modelling alone.	Underway	
	15	2022	Q3	MMS	2.3.13	Develop package of mitigation measures	TfL will work closely with affected local authorities to identify and develop the package of localised traffic mitigation to be implemented pre-opening. Once the proposed package of localised traffic-related mitigation measures has been finalised, TfL will submit details of the package to the Secretary of State for Transport for approval.	underway	10/11/2022 - long list workshop held with borough officers on 1 Nov 15/03/2023 - meetings held to discuss shortlist locations with LBTH, LBN and RBG in Feb and March
	16	2022	Q1	MMS	2.3.8	Take view of LHAs into account in assessing localised mitigation measures	In assessing the need for localised mitigation for locations in the short list, TfL will take into account views from the affected local highway authority (or authorities should the location affect more than one borough).	underway	15/03/2023 - meetings held to discuss shortlist locations with LBTH, LBN and RBG in Feb and March
	17	2025	Q2	MMS	3.8.5	TfL to install noise monitors	Once operational, the noise monitoring will continue for a minimum of three years. Before the end of that period, TfL will consult STIG members on whether it is appropriate to extend this period by up to an additional two years.	Not started	
	18	2023	Q2	DCO	Sch 2 Req 7 (2)	Implementation of mitigation measures when TfL powers are not sufficient	If the statutory powers vested in TfL in relation to highways and road traffic in Greater London are not sufficient to enable TfL to implement any mitigation measure which it is obliged to implement under this requirement, TfL must either agree with the council to implement the changes on its behalf or pay the council to implement the measures.	Not started	
	19	2020	Q4	DCO	Sch 2 Req 7(4)	Refreshed assessment	TfL must undertake an updated assessment of the scheme's impacts and consult STIG on a proposed scheme of mitigation including the locations where mitigation is required, the measures proposed and the programme for implementation	Underway	15/03/2023 - meetings held to discuss shortlist locations with RBG, LBN (21 Feb) and LBTH (1 Mar)
	20	2022	Q4	DCO	Sch 2 Req 7 (5)	Consultation on the scheme of mitigation	TfL must have regard to any consultation responses from STIG members on the proposed mitigation and engage with local highway authorities as required.	underway	15/03/2023 - meetings held to discuss shortlist locations with RBG, LBN (21 Feb) and LBTH (1 Mar)
	21	2023	Q3	DCO	Sch 2 Req 7 (7)	SoS to consult STIG on mitigation measures	The Silvertown Tunnel must not open for public use until the scheme of mitigation has been approved by the Secretary of State. If the Secretary of State proposes to approve the scheme of mitigation with material modifications, the Secretary of State must consult the members of STIG on the proposed modifications and have regard to any responses received when deciding whether to approve the scheme. Before considering whether to approve the scheme of mitigation (post-opening), the Mayor of London must consult any relevant air quality authority and take into consideration any responses received.	Not started	
	22	2025	Q1	DCO	Sch 2 Req 7	Mayor of London to consult relevant air quality authority	TfL must implement or secure the implementation of the scheme of mitigation (post-opening) approved by the Mayor of London in accordance with the programme contained in the approved scheme of mitigation.	Not started	
	23	2023	Q1	MMS	2.1.8	Development of pre-opening mitigation measures	If, through the refreshed assessment, the need for localised traffic-related mitigation measures is identified, TfL will develop these measures in consultation with STIG and submit them to the Secretary of State for Transport for approval.	underway	15/03/2023 - meetings held to discuss shortlist locations with RBG, LBN (21 Feb) and LBTH (1 Mar)
	24	2023	Q3	MMS	2.1.8	Implementation of pre-opening mitigation measures	TfL must then implement the approved measures before the Silvertown Tunnel opens for public use, or provide funding for the relevant local highway authority to implement them.	Not started	
	25	2024	Q1	MMS	2.1.9	Noise mitigation measures	Any measures required to mitigate residual noise impacts will be submitted for the approval of the local planning authority in accordance with requirement 12 of the DCO.	Not started	
	26	2021	Q3	MMS	2.2.2	Approach to refreshed assessment	TfL will engage with STIG members on the approach to completing the refreshed assessment, including aspects that are of particular interest to host boroughs such as the collection of origin and destination data and users' values of time (including stated preference surveys).	Underway	See #13
	27	2022	Q4	MMS	2.3.4	STIG review of long-listed mitigation measures	Once the long list has been populated this will be reviewed in consultation with the members of STIG and TfL will make a decision on which locations will be included within a 'short list' to be assessed further using local modelling.	Underway	10/11/2022 - long list workshop held with borough officers on 1 Nov
	28	2021	Q4	MMS	2.5.2	Commencement of baseline monitoring	Monitoring of baseline conditions pre-opening will commence no later than three years prior to the expected date of Scheme opening, and any data that is required to inform the refreshed assessment (for example traffic counts) will be collected as part of this process.	Underway	Dec20 - air quality baseline monitoring is underway Oct21 - baseline socio-economic monitoring (primary data) underway Nov21 - baseline traffic monitoring underway

	29	2021	Q2	MMS	2.5.2	Final scope of monitoring programme	The finalised scope of the monitoring programme will be presented to STIG members for review approximately six months before the commencement of traffic-related monitoring (i.e. around three and a half years prior to Scheme opening).	Underway	27/05/21 - traffic monitoring approach presented to STIG 24/09/21 - further information on approach to be presented at 30/09 STIG meeting	
	30	2020	Q3	MMS	3.3.2	Monitoring data collected by others	The monitoring programme will be of sufficient scope to provide a sound understanding of the impact of the Scheme in operation. Nonetheless, TIL recognises the value of monitoring undertaken by others and hence in addition to the data collected through the monitoring programme, TIL will take into account monitoring data collected by local authorities and other bodies where it is relevant and appropriate to do so.	Underway		
	31	2022	Q4	MMS	3.5.3	Geographical extent of monitoring	The geographical scope of the monitoring will be reviewed at the time when TIL is undertaking its refreshed assessment of Scheme impacts. Should this refreshed assessment identify potential Scheme impacts at locations not identified in current modelling, the scope of the monitoring programme will be extended to ensure these locations are included in the monitoring programme. If justified by the refreshed assessment, the monitoring of Scheme impacts could be undertaken over a much wider area through TIL's wider monitoring programmes.	underway	10/11/2022 - long-list workshop held with borough officers on 1 Nov	
	32	2020	Q3	MMS	3.7.1	Commencement of air quality monitoring	Three years prior to Scheme opening TIL will install a network of diffusion tubes and, where appropriate, automatic air quality monitors to collect air quality data for a continuous period of at least twelve months to establish an up-to-date baseline. This will provide a picture of the actual concentrations at a point closer to the Scheme opening. In addition, the results of monitoring undertaken by relevant local authorities and Defra will be utilised by TIL to provide additional baseline information.	Underway	Diffusion tubes and CMS installed at agreed sites - baseline air quality monitoring data collection underway since December 2020.	
03 - User Charging	33	2024	Q4	Charging Policy	2.3.4	User charge principles	For a period of not less than 56 days prior to Scheme opening, eligible residents and small businesses in the host boroughs will be able to register online for a payment account without paying the annual registration fee for the initial year (Policy 5).	Not started		
	34	2025	Q1	Charging Policy	2.3.7	User charge discount	For the duration of the monitoring period a discount of not less than 50% on the user charges will be available for eligible residents of host boroughs on a low income who register for an online account with TIL. After the expiry of the monitoring period, TIL will review in consultation with the host boroughs whether the discount should continue (Policy 6).	Not started		
	35	2023	Q1	Charging Policy	3.2.3	Setting the initial user charge	The extent to which the user charges will assist in achieving the Project Objectives is the primary consideration which TIL will have regard to when setting the initial user charges (policy 9). In this TIL will have regard to: - traffic - the environment, and - population, economy and growth - other project objective considerations, including the ability to pay for the Scheme.	underway		
	36	2023	Q2	Charging Policy	3.2.4	Setting the initial user charge	TIL will set the initial charges at a level and subject to conditions so that the Scheme in operation is not likely to give rise to materially new or materially different environmental effects to those reported in the ES (Policy 10).	underway		
	37	2025	Q2	Charging Policy	3.3.1	Variations to the user charges	TIL must keep the user charges under review, and will make variations to charges where this is considered necessary to ensure the continued achievement of the Project Objectives (policy 11). In this TIL will have regard to: - traffic - the environment, and - population, economy and growth - other project objective considerations, including the ability to pay for the Scheme.	Not started		
	38	2021	Q4	Charging Policy	4.2.1	Setting the initial user charge	TIL must set initial charges before the Silvertown Tunnel opens to traffic. The process for setting the charges will commence around two and a half years in advance of Scheme opening.	Underway		
	39	2021	Q4	Charging Policy	4.2.1	Setting the initial user charge	In the setting of the initial user charge, TIL will follow this process - TIL will re-run the strategic traffic model (using up-to-date data) - TIL will use the outputs of this model run to undertake a re-assessment of the significant likely effects of the proposed initial user charges on air quality, noise, socio-economic effects, in accordance with the approach adopted in the Environmental Statement (Document Reference: 6.1) - TIL will populate the UCAF with its impact assessment	Underway	Re-run of strategic traffic modelling is underway	
	40	2023	Q3	Charging Policy	4.2.1	Setting the initial user charge	TIL will consult with members of STIG on the proposed charges for the opening year, and present the completed UCAF. STIG members may make recommendations or representations to TIL in response to these, and the views of STIG's members will be recorded	underway		
	41	2024	Q3	Charging Policy	4.2.1	Setting the initial user charge	TIL will submit the proposed opening user charges, including setting out the recommendations and representations of STIG members, to the TIL Board for approval. When deciding whether or not to approve the proposed charges the TIL Board must: - in accordance with article 65 of the DCO have regard to any recommendations or representations made by members of STIG; and - only approve the charges if it is satisfied that Policies 9 and 10 of the Charging Policy are met.	Not started		
	42	2024	Q3	Charging Policy	4.2.1	Setting the initial user charge	The completed UCAF will be published on TIL's website as a record of the assessment undertaken.	Not started		
	43	2025	Q2	Charging Policy	4.3.1	Variations to the user charges	In proposing variations to the user charges, TIL will use the UCAF to assess the likely impacts of variations to the charges on the achievement of the Project Objectives and other considerations (set out in 3.3 of the Charging Policy). In accordance with Article 65 of the DCO, TIL will consult with members of STIG on these proposed variations who may make representations and recommendations in response.	Will be undertaken if required		
	44	2025	Q2	Charging Policy	4.3.1	Variations to the user charges	TIL will then submit the proposed variations to the user charges, including setting out the recommendations of STIG members, to the TIL Board for approval. When deciding whether or not to approve the variations the TIL Board must: - in accordance with article 65 of the DCO have regard to any recommendations or representations made by members of STIG; and - only approve the charges if it is satisfied that the proposed charges comply with Policy 12 of the Charging Policy.	Will be undertaken if required		
	45	2024	Q3	Charging Policy	4.4.1	Statement of charges	In accordance with Article 53 of the DCO, where the TIL Board decides to approve the proposed charges (for the initial charge and for subsequent variations), TIL must publish a Statement of Charges describing the charges in the form set out in Appendix A of the Charging Policy or in a form to the like effect. The Statement will set out the date from which the charges take effect.	Not started		
	46	2026	Q3	Charging Policy	5.1.2	12-month review of user charges	TIL must complete a '12-month review' of the user charges not later than 15 months after the Scheme opens for public use and, if necessary, must revise the charges to mitigate any significant adverse impacts attributable to the Scheme which were not predicted in the preopening assessment (Policy 15).	Not started		
	47	2026	Q3	Charging Policy	5.4	12-month review of user charges	TIL will consult on its proposed response to the data analysis for the '12-month review' with members of STIG. Members of STIG may make representations in response to TIL's proposal. The decision on the response to the review will be made by TIL. TIL will publish a report summarising the review and its outcome.	Not started		
	48	2023	Q1	DCO	53 (2)	Revisions to charging policy	TIL must consult STIG on any proposed revisions to the charging policy	Will be undertaken if required		
	04 - Buses	49	2023	Q1	Bus Strategy	2.2.3	Concessionary bus travel	Commitment 1: TIL must provide £2m in funding for concessionary bus travel to residents of the London Boroughs of Newham and Tower Hamlets and the Royal Borough of Greenwich for a period after the Silvertown Tunnel opens for public use	Underway	
		50	2022	Q2	Bus Strategy	3.4.3	Bus network proposals	Commitment 7: Prior to the Silvertown Tunnel opening for public use TIL will consult with STIG members on its outline proposals with regard to the bus network.	Underway	Working group meetings held with STIG members held on 20 Oct 2021, 11 May 2022 and 12 October 2022.
51		2022	Q2	Bus Strategy	3.4.5	Bus network planning	Commitment 8: Bus service planning will commence not less than 2 years prior to Scheme opening, using TIL's Bus Service Planning Guidelines	Underway		
52		2023	Q1	Bus Strategy	3.4.8	Bus priority measures	Commitment 9: TIL will work with STIG members to seek opportunities to implement bus priority measures on the network around the Silvertown Tunnel, for example by undertaking bus priority studies	Not started		
53		2022	Q2	Bus Strategy	3.6.3	Socio-economic impacts of bus services	Commitment 10: TIL and STIG members will consider socio-economic monitoring and information in assessing bus services.	Underway	17/11 - first year socio-economic monitoring report pre-tunnel opening complete and shared with STIG in November 2022	
54		2025	Q2	Bus Strategy	3.6.4	Socio-economic impacts of bus services	Commitment 11: TIL will collect monitoring data on cross-river bus performance and use this to modify services in order to maintain the continued achievement of the Project Objectives.	Not started		
55		2022	Q3	DCO	Sch 2 Req 7 (10)	Monitoring programme implementation	For the duration of the monitoring period (at least 3 years before opening and 3 years after scheme opens), TIL must— (a) implement a monitoring programme in consultation with the members of STIG;	Underway		

05 - Monitoring / post-opening mitigation	56	2022	Q3	DCO	Sch 2 Req 7 (10)	Monitoring reports	For the duration of the monitoring period (at least 3 years before opening and 3 years after scheme opens), TIL must— (b) prepare— (i) quarterly monitoring reports for a period of one year from the Silvertown Tunnel opening for public use, and (ii) annual monitoring reports thereafter, derived from that monitoring, and submit them for consideration by the members of STIG;	Underway	
	57	2023	Q3	DCO	Sch 2 Req 7 (10) (c) and (d)	Thresholds for changes to the highway network	For the duration of the monitoring period (at least 3 years before opening and 3 years after scheme opens), TIL must— (c) identify in consultation with the members of STIG appropriate thresholds for changes on the highway network which require TIL to investigate whether mitigation measures are necessary; (d) develop in consultation with the relevant highway authority any measures which are necessary to mitigate adverse impacts on the highway network which are attributable to the operation of the authorised development;	Not started	
	58	2025	Q2	DCO	Sch 2 Req 7 (10)	Development of post opening mitigation measures	For the duration of the monitoring period (at least 3 years before opening and 3 years after scheme opens), TIL must— (d) develop in consultation with the relevant highway authority any measures which are necessary to mitigate adverse impacts on the highway network which are attributable to the operation of the authorised development; and	Underway	
	59	2025	Q2	DCO	Sch 2 Req 7 (10)	Consultation with STIG on changes required to the highway network.	For the duration of the monitoring period (at least 3 years before opening and 3 years after scheme opens), TIL must— (e) implement or secure the implementation of the necessary mitigation measures.	Not started	
	60	2026	Q1	DCO	Sch 2 Req 7 (14)	Independent review of air quality monitoring data	The monitoring data within each annual monitoring report referred to in sub-paragraph (10) must be reviewed as soon as reasonably practicable by a firm of independent air quality experts appointed by TIL in consultation with the members of STIG. The annual review undertaken by the firm of experts must determine in accordance with the criteria set out in the monitoring and mitigation strategy whether or not there has been a material worsening of air quality as a result of the authorised development beyond the likely impacts reported within the environmental statement at locations where there are (whether as a result of the authorised development of otherwise) exceedances of national air quality objectives.	Not started	
	61	2020	Q3	MMS	3.4.1	Commencement of monitoring	The monitoring programme will commence no later than three years prior to the expected date of Scheme opening.	Completed	Dec20 - air quality baseline monitoring is underway Oct21 - baseline socio-economic monitoring (primary data) underway Nov21 - baseline traffic monitoring underway
	62	2025	Q2	MMS	3.4.1	Extending the monitoring period	The duration of the post-opening monitoring will be reviewed and TIL will consult the members of STIG on whether it is appropriate to extend this period by up to an additional two years.	Not started	
	63	2025	Q2	MMS	3.5.4	Scheme impacts not captured by monitoring programme	Once the Scheme is operational, should a member of STIG identify potential impacts that they consider may be a result of the Scheme at a location not being monitored under the Scheme's monitoring programme at that time (for instance using TIL's publicly available wider data set), this can be brought to TIL's attention for further consideration and possible inclusion in the monitoring programme going forward.	Not started	
	64	2026	Q3	MMS	3.7.6	Reporting and expert review of AQ data	The air quality monitoring data will be reported in the annual monitoring report which must be reviewed as soon as reasonably practicable by a firm of air quality experts appointed by TIL in consultation with STIG members. The expert review must determine whether or not there has been a material worsening of air quality as a result of the Scheme (as detailed in section 4.4 of this document).	Not started	
	65	2025	Q2	MMS	3.10.3	Quarterly interim reports in first year after opening	For the first year after the Silvertown Tunnel opens for public use, TIL will produce and submit to STIG interim monitoring reports on a quarterly basis to help ensure that any impacts can be identified promptly. These reports will be less detailed than the annual monitoring reports but will include data collected to date and a high level analysis of the results.	Not started	
	66	2026	Q3	MMS	3.11.1	Production of monitoring reports	The annual monitoring reports will be produced by TIL and sent to STIG members within two months of data collection.	Not started	
	67	2026	Q3	MMS	3.11.1	STIG review of monitoring reports	STIG will be responsible for: • Reviewing the findings presented in the monitoring reports • Considering the need for and type of any mitigation measures that might be required to address Scheme impacts, in line with the process set out in Chapter 4 of this document • Reviewing the monitoring programme and make recommendations to TIL for changes where appropriate	For reference	
	68	2020	Q3	MMS	3.11.2	Changes to monitoring programme	Proposals for changes to the monitoring programme can be made by any member of STIG in the interest of enabling future impacts to be fully captured. Aspects on which STIG members may request changes include the monitoring locations, metrics considered and data collection methods. In updating the monitoring programme, TIL shall have regard to any recommendations made by STIG.	Will be undertaken if required	
	69	2026	Q3	MMS	3.11.3	Contents of monitoring reports	STIG will also be able to request changes to the contents of the monitoring reports including the addition of new topics and removal of existing topics if considered appropriate. TIL will remain responsible for the final content and structure of the monitoring reports.	Not started	
	70	2026	Q3	MMS	4.1.2	Post-opening mitigation measures	The need for any mitigation following the Scheme's opening will be identified through review of the monitoring reports containing the data collected through the monitoring programme. Different processes will apply to different Scheme impacts, as follows:.....	Not started	
	71	2026	Q3	MMS	4.1.2	Post-opening mitigation measures	The air quality data will be reviewed by a firm of experts appointed by TIL in consultation with the members of STIG. If in the view of the experts there has been a material worsening in air quality as a result of the Scheme, TIL must develop a scheme of mitigation and submit this to the Mayor of London for approval.	Not started	
	72	2026	Q1	MMS	4.4.1	Appointment of independent air quality expert	TIL will appoint an independent air quality expert to review the post-opening air quality monitoring data set in the annual monitoring reports. TIL will consult with STIG members regarding the expert to be appointed.	Not started	
	73	2026	Q1	MMS	4.5.2	Appointment of noise expert	TIL will appoint an independent noise expert to carry out an annual review the post-opening noise monitoring data presented within the annual monitoring reports. TIL will consult STIG members regarding the expert to be appointed.	Not started	
	74	2026	Q2	MMS	4.5.3	Annual review by independent noise expert	If the annual review carried out by the independent noise expert concludes that the difference in calculated Basic Noise Level values between the predicted flows and measured flows through the Blackwall and Silvertown Tunnel is greater than 1dB (and that the difference is attributable to the Scheme), TIL will consider the need for localised noise mitigation measures in consultation with the relevant local authorities.	Not started	