# TfL River Crossings programme – Silvertown Tunnel

Responses to issues raised report Consultation Oct – Dec 2014



#### Introduction

This report sets out TfL's responses to the issues raised during our consultation on the Silvertown Tunnel scheme, which ran from 15 October – 19 December 2014.

We received over 4,600 responses in total. In summary, the main outcomes of the consultation were:

- 83 per cent of respondents agreed that a new crossing is needed and could address the issues of congestion and poor resilience at the Blackwall Tunnel,
- 57 per cent of respondents opposed the proposed user charge, although a significant minority of 37 per cent respondents supported the charge. 45 per cent of respondents said that they would use a new account system to pay the charge,
- 54 per cent of respondents agreed that the proposed new junction in the Greenwich Peninsula area provided the right connections to the Silvertown Tunnel, and 48 per cent agreed that the new junction in the Royal Docks did so. Only 23 per cent of respondents disagreed that the proposed new junction in the Greenwich Peninsula area provided the right connections, and 19 per cent disagreed that the new junction in the Royal Docks did so.

Respondents to the consultation made a large number of written comments. We have published a Consultation Report, which sets out in detail the issues raised. It is available on our website at this link:

https://consultations.tfl.gov.uk/rivercrossings/silvertown-consultation.

This document is intended to be read alongside our Consultation Report; most particularly Appendix C of the report, which contains a 'code frame', listing all of the issues that were raised by respondents.

In preparing this document, we have combined the issues raised by respondents into broad themes where it is relevant and logical to do so. This has helped to keep the length of this document more manageable, and avoids it becoming unnecessarily repetitive.

#### **About this document**

This report covers the issues that were raised in the consultation responses in several thematic sections. These sections are:

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#### **Conclusions & next steps**

The feedback we received from consultation was very useful and will help us to refine and enhance TfL's Silvertown Tunnel scheme. We will carry out further work to develop the scheme over the coming months. We will then conduct a further consultation in the autumn 2015 on an application to the Secretary of State for a 'Development Consent Order' authorising the construction and operation of the tunnel.

The responses we receive from that consultation will be taken into account in finalising the application which we intend to submit in the spring 2016. The application will be subject to a full independent examination. It is anticipated that a decision on the application would be made by the Secretary of State by late 2017. The earliest that the new tunnel could open is 2021/2022.

#### **Traffic & Environmental issues**

Issue raised	Our response
The need for a new road tunnel at	Our response
Silvertown	We consider that the forecast increase in London's population and economic growth is
Silvertown	very likely to lead to an increase in trips as more people will need to access work,
Some respondents questioned	education, and travel for business or for leisure. Our Traffic Forecasting report, which was published during the consultation, makes clear our conclusions in this regard and is
whether there was a need for the	available on our website at this link:
Silvertown Tunnel, suggesting that an	http://www.tfl.gov.uk/cdn/static/cms/documents/st-silvertown-traffic-forecasting-report.pdf.
increasing population and economic	The report used population and employment figures (as contained in the Mayor's London
growth would not necessarily lead to	Plan) as well as assumptions from Government on economic growth, to predict overall
an increase in traffic volumes on	travel demand on both public transport and the highway network.
London's roads.	and the same and t
	While the Mayor's Transport Strategy is focused on ensuring that as many of these
	additional trips take place by bus or other public transport services, there will always be a
	need for some trips to be made by private road vehicles, particularly freight and servicing
	trips, which cannot easily use alternative modes.
Demand for the Silvertown Tunnel	One of the objectives of the Silvertown Tunnel is to address the congestion experienced at
from traffic	the Blackwall Tunnel. In the absence of the proposed user charge, a possible
	consequence of having an additional tunnel is that these crossings become a more
Some respondents raised concerns	attractive option, leading to more traffic using both tunnels than previously used the
that the construction of a new road	Blackwall Tunnel – potentially undermining decongestion benefits. The proposed user
tunnel would increase the amount of	charge for the Blackwall and Silvertown Tunnels is in part designed to mitigate this effect,
traffic using the local road network to access the new link, and queried the	managing demand to ensure that the local road network can accommodate future traffic levels and prevent significant overall increases in highway travel.
impact that this additional traffic would	levels and prevent significant overall increases in highway travel.
have.	Traffic modelling undertaken to date indicates that a user charge would be successful in
ilavo.	preventing unsustainable levels of growth in demand for the Blackwall and Silvertown
	Tunnels compared to a scenario where the tunnels were not charged. We would also
	expect traffic to flow much more smoothly on both sides of the river following the
	implementation of the Silvertown Tunnel scheme. Nevertheless, because the scheme

	would create an entirely new connection, the proposed scheme would lead to some changes in traffic patterns. This could mean increased traffic in some areas with a reduction in other areas.
Comments on or suggestions for potential traffic mitigation schemes  Some respondents suggested specific schemes that they felt TfL should consider as a means for mitigating the effects of the Silvertown Tunnel on traffic. In other cases, respondents identified particular areas where they felt the tunnel scheme could have an impact on traffic, and asked that TfL consider this.	The key measure which TfL proposes to use to manage traffic impacts arising from the Silvertown Tunnel is user charging, which would act to deter increases in demand and should therefore minimise adverse impacts.  In addition, we are currently undertaking further traffic modelling work to identify any potential residual traffic impacts arising from the Silvertown Tunnel scheme and we will put forward specific mitigation measures where these are considered necessary and appropriate. These measures could include changing traffic signal timings or introducing new signage to guide drivers, although physical alterations to junctions could also help to address more significant issues.  We would continue to monitor the effects of the Silvertown Tunnel on traffic once the new tunnel opens, and could take further mitigating steps to manage traffic levels if necessary.  We will include further information in our next consultation, which we plan to undertake in autumn 2015.
Comments about the adequacy of TfL's traffic modelling data  Some respondents commented about the traffic modelling data we published during the consultation, which showed our initial understanding of the effects of the scheme on traffic flow. Our data focused on the effects of the scheme on traffic levels at the time of the scheme opening. Some respondents	We are currently undertaking further modelling assessment of the likely traffic effects of the Silvertown Tunnel scheme. In our next consultation we will present traffic data for the forecast opening year 2021, and also 2031 and 2041.

felt that this was inadequate or had other concerns about the data, for example by commenting that we should produce forecasts for future years In other cases, respondents commented that they felt our technical reports were too detailed. We address these more general issues with our technical reports within the 'Comments about the consultation' section.

Comments about proposed changes to the A102 Blackwall Tunnel Approach

We received comments about the design of the new junction to link the Silvertown Tunnel to the existing road network on the south side of the river. Some respondents were concerned that the new tunnel would share a southern approach with the Blackwall Tunnel; in many cases highlighting existing issues with congestion on this approach road. Others suggested changes should be made to the southern approach, including suggestions for measures to mitigate the environmental or visual impacts of the tunnel and its associated infrastructure, such as noise barriers.

The northbound A102 Blackwall Tunnel Approach Road is made up of three lanes for much of its length. However, the Blackwall Tunnel is made up of only two general traffic lanes in each direction. Because of this, at a point just north of the over-height vehicle off-slip road, northbound traffic must merge down to two lanes so that it can enter the Blackwall Tunnel. Since the proposed Silvertown Tunnel scheme would create additional traffic lanes, there would no longer be any need for traffic to be merged into two lanes, enabling the existing pinch-point to be removed. Hence the effective capacity of the A102 would be increased in tandem with the increase in tunnel capacity. The proposed user charge would act to manage any increases in traffic demand so that overall, we do not anticipate that there would be an increase in demand here.

A key issue is that the Blackwall Tunnel is currently not resilient to the effects of incidents or accidents: if the tunnel becomes unavailable due to a breakdown, collision or if an overheight vehicle attempts to access the northbound bore, there are no nearby alternative routes for traffic to take with the result that the congestion at the tunnel is exacerbated. Building the Silvertown Tunnel nearby the Blackwall Tunnel would give traffic a readily accessible alternative route for traffic to divert to in the event of a planned or unplanned closure.

As we continue to develop the scheme, we are taking account of the various suggestions and comments made by respondents. We will propose mitigating measures at those

areas on the road network where our modelling shows that the tunnel scheme would cause an impact requiring such measures.

We are also developing an urban design strategy to complement the proposed changes to the highway network. We will include further information regarding this strategy in our next consultation, planned for the autumn 2015.

## Comments about proposed changes to the Tidal Basin roundabout

We also received comments about the changes we propose making to the Tidal Basin roundabout, to link the Silvertown Tunnel to the existing road network on the north side. Some respondents were concerned that traffic using the Silvertown Tunnel could seek a route to the A13 and beyond via Canning Town, or were concerned more generally about the effects of traffic using the Royal Docks area to access the new tunnel. In other cases, respondents asked us to rethink our plans to link the tunnel to the road network on the north side, for example by establishing a direct link to the A406 North Circular Road.

The Silvertown Tunnel scheme is primarily intended to address congestion and resilience. A further benefit of the scheme is that it will improve connections to the globally-recognised commercial and economic hubs nearby. Our proposals to reconfigure the Tidal Basin roundabout are designed to ensure there is easy access to the Royal Docks, Canning Town and Canary Wharf areas, to support the significant development planned here over the coming years. There is no straightforward access to the eastern A13 from Silvertown, and we anticipate that most traffic should instead continue to use the Blackwall Tunnel for journeys involving the A13. This is supported by our traffic modelling to date, which indicates that the largest proportion of traffic using roads in the Royal Docks area to access the Silvertown Tunnel would be originating from or travelling to the local area. Our model shows that traffic from further afield would be unlikely to access the Silvertown Tunnel through the Royal Docks area.

Separately, we propose building a new bridge or tunnel at Gallions Reach and Belvedere by 2025. These crossings would provide additional cross-river links and could help to reduce the existing pressure on the eastern A13.

It would not be practical to provide a direct link to the A406 from the Silvertown Tunnel; doing so would require the tunnel to be built elsewhere which would reduce the scheme's ability to improve the resilience of the highway network, including when there are incidents at the Blackwall Tunnel. When there is a vehicle breakdown, collision or other incident at the Blackwall Tunnel there are currently no nearby alternative routes available for traffic to use. The Silvertown Tunnel would improve the resilience of the cross-river highway network by providing an alternative link very close to the Blackwall Tunnel.

In the future, the crossing we propose to build at Gallions Reach would provide better access to the A406. In the meantime, the best means of accessing the A406 would be to use the Blackwall Tunnel and the A12 or A13.  Managing the Blackwall Tunnel We received comments about the Blackwall Tunnel, including from respondents who queried what more could be done to reduce incidents at the tunnel. Some respondents asked that we continue to focus on reducing disruptive incidents at the Blackwall Tunnel, or make other improvements to it, after the Silvertown Tunnel had opened.  In the future, the crossing we propose to build at Gallions Reach would provide better access to the A406. In the meantime, the best means of accessing the A406 would be to use the Blackwall Tunnel and the A12 or A13.  In recent years we have taken a number of steps to improve the performance of the Blackwall Tunnel, including from respondents as practically possible those incidents which disrupt the smooth operation of the tunnel. These have included:  In troducing a dedicated policing resource to respond to incidents at the Blackwall Tunnel, to ensure these are cleared as quickly as possible and to reduce the time the tunnel must remain closed;  In Introducing a new automatic overheight vehicle detection system, to reduce the number of incidents in which vehicles that are too high for the tunnel attempt to gain access to the northbound bore, where there is a 4m height restriction;  Introducing a 24/7 vehicle recovery service to facilitate timely removal of all types of broken down vehicles within the tunnel;  Refurbishing the northbound bore of the Blackwall Tunnel to reduce the number of instances in which it is necessary to close the bore for routine or emergency maintenance.  The smooth and effective operation of the Blackwall Tunnel will continue to remain a high priority when the Silvertown Tunnel, whilst enabling extra cross-river capacity that would support increases in London's population and economic growth, would also significantly		
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As we continue to develop the Silvertown Tunnel scheme we will take account of the various suggestions and comments made by respondents, and introduce mitigating measures at those locations where our traffic modelling shows that the tunnel scheme would cause an adverse impact on the road network.	We received comments about the Blackwall Tunnel, including from respondents who queried what more could be done to reduce incidents at the tunnel. Some respondents asked that we continue to focus on reducing disruptive incidents at the Blackwall Tunnel, or make other improvements to it, after the Silvertown Tunnel had	<ul> <li>Blackwall Tunnel and reduce as far as practically possible those incidents which disrupt the smooth operation of the tunnel. These have included:</li> <li>Introducing a dedicated policing resource to respond to incidents at the Blackwall Tunnel, to ensure these are cleared as quickly as possible and to reduce the time the tunnel must remain closed;</li> <li>Installing a new automatic overheight vehicle detection system, to reduce the number of incidents in which vehicles that are too high for the tunnel attempt to gain access to the northbound bore, where there is a 4m height restriction;</li> <li>Introducing a 24/7 vehicle recovery service to facilitate timely removal of all types of broken down vehicles within the tunnel;</li> <li>Refurbishing the northbound bore of the Blackwall Tunnel to reduce the number of instances in which it is necessary to close the bore for routine or emergency maintenance.</li> <li>The smooth and effective operation of the Blackwall Tunnel will continue to remain a high priority when the Silvertown Tunnel is in place, although by reason of its design and age there will always be the potential for traffic disruption caused by planned and unplanned incidents. The Silvertown Tunnel, whilst enabling extra cross-river capacity that would support increases in London's population and economic growth, would also significantly reduce the negative effects of these events at the Blackwall Tunnel by providing a readily available alternative route for the traffic affected to divert to.</li> <li>As we continue to develop the Silvertown Tunnel scheme we will take account of the various suggestions and comments made by respondents, and introduce mitigating measures at those locations where our traffic modelling shows that the tunnel scheme</li> </ul>

## Proposals for other river crossing schemes

Some respondents commented that they wanted TfL to commit to progressing a package of river crossings. Many respondents suggested that TfL also progress a new crossing at Gallions Reach to connect Thamesmead and Beckton, or that we should make it a priority over the Silvertown Tunnel. Some respondents also suggested that a new crossing is progressed further east at Belvedere.

As described in the consultation materials and earlier in this document, there are specific issues facing the Blackwall Tunnel. The tunnel was not designed to cope with the current level of traffic wishing to use it and there is regular queuing as a result. When there is an incident at the tunnel which requires that it be temporarily closed, there are no nearby alternative routes for traffic to readily divert to, which significantly exacerbates the day-to-day congestion. We have developed the Silvertown Tunnel scheme as a means to address these specific issues, amongst other purposes. The tunnel would provide additional road capacity in an area where it is needed and would also provide an accessible alternative route for traffic to take if there is an incident at the Blackwall Tunnel.

At the same time, TfL recognises that a lack of river crossings in east London generally causes other adverse impacts – principally in restricting access to jobs, education or leisure for residents; or access to markets, suppliers and staff for businesses. We have proposed accordingly that the Silvertown Tunnel be part of a wider package of new crossings – to include new bridges or tunnels at Gallions Reach and Belvedere. We will continue to develop proposals for new crossings 'east of Silvertown' and plan to hold a further consultation on our plans later this year. The crossings at Gallions Reach and Belvedere, however, could not address the issues at the Blackwall Tunnel in isolation, particularly in terms of its resilience to incidents, so cannot be a replacement or alternative to the Silvertown Tunnel.

## Comments about the environmental effects of the Silvertown Tunnel scheme

We received comments from respondents who questioned what effect the scheme would have on noise and air quality, or who suggested specific measures we should consider to mitigate any Our consultation materials explained that the existing congestion at the Blackwall Tunnel contributes to poor air quality, amongst other adverse impacts, because congested and stop-start conditions increase the rate of vehicle emissions per kilometre travelled. The introduction of the Silvertown Tunnel would address the issues of congestion and poor resilience at the Blackwall Tunnel and thereby help to reduce the impact of traffic on air quality.

Our current assessment is that implementing the Silvertown Tunnel scheme would bring about a change in traffic flows on both sides of the river. Where traffic levels increase, there is likely to be an increase in emissions and where traffic volumes decrease there is

negative impacts. Some respondents drew our attention to particular areas where they felt we should consider mitigating measures, without specifying what those measures should be.	likely to be a decrease in emissions.  As we continue to develop the scheme we will carry out full air quality and noise modelling based on a refined user charge and consider the various suggestions and comments made by respondents. We will also propose mitigating measures at those areas where our modelling shows that the tunnel scheme would cause an impact. These measures could include using low-noise surfaces to build the Silvertown Tunnel, although we will consider all options.
Comments about impacts during construction of the Silvertown Tunnel  Some respondents wanted to know more about how we might build the new tunnel, or about what impacts the construction might have.	Over the coming months we will prepare an outline methodology for the construction of the Silvertown Tunnel, setting out our thinking on how the tunnel could be built. We will also prepare a draft 'Code of Construction Practice', which will set out how we will manage any impacts and disruption caused during the construction of the Silvertown Tunnel and associated works. The draft 'Code' will be available during our next consultation, which we intend to undertake during autumn 2015. TfL has extensive experience of managing and mitigating the effects of construction from large-scale schemes such as Crossrail and Victoria Station upgrade.
Managing traffic once the Silvertown Tunnel has been built  Some respondents commented on the manner in which traffic could be managed once the Silvertown Tunnel was in operation, including suggesting specific signage they felt we should consider.	We will explore this issue in greater detail as we continue to develop the scheme, and in doing so will consider the specific suggestions made by respondents to the consultation. TfL has an overarching duty for the effective management of the Transport for London Road Network (TLRN) and transport in London more generally and would continue to carry out this function with Silvertown Tunnel in place.
The effect of the Silvertown Tunnel on demand for the Rotherhithe Tunnel or Woolwich Ferry  Some respondents to the consultation	The route from Blackwall Tunnel to the Rotherhithe Tunnel and Woolwich Ferry on either side of the river Thames is long, and thus in most circumstances it is unlikely that it would be attractive to motorists who ordinarily choose to use the Blackwall Tunnel.  We have modelled what effect the user charge would have on the choice of route made by

were concerned that a user charge at the Silvertown and Blackwall Tunnels could cause traffic to divert to the Rotherhithe Tunnel or Woolwich Ferry. In some cases, respondents asked whether this effect would also necessitate a user charge at these crossings. drivers, and specifically considered whether a significant number of drivers who currently use the Blackwall Tunnel would divert to Rotherhithe or Woolwich if the Blackwall Tunnel were charged. The model output shows that, depending on the level that the charge is set, most drivers would choose to pay the charge rather than increase the length of their journey by diverting to the Rotherhithe Tunnel or Woolwich Ferry. Given the distances involved and since the majority of drivers would prefer to minimise travelling time as much as possible, there would only be a significant impact at Rotherhithe and Woolwich if the charge at the Blackwall and Silvertown Tunnels was set at such a level that drivers felt it was worth the additional journey time to avoid the charge.

Based on our current understanding of what level of charge range would be necessary to adequately managed demand for the Blackwall and Silvertown Tunnels, we do not anticipate that there would be a significant level of diversion to the Rotherhithe Tunnel or Woolwich Ferry. For this reason, we do not believe at this time that it would be necessary to set a charge at these crossings. That said, over the coming months we will undertake further work to improve our understanding of the charging range that would be necessary at Blackwall and Silvertown. We may need to review whether it is necessary to introduce charging at Rotherhithe or Woolwich depending on the outcome of this work. We will confirm our thinking in our next consultation, planned for the autumn 2015.

## Public transport, walking & cycling

Issue raised	Our response
Suggestions for new public	TfL will continue to enhance and expand London's public transport network, including by
transport services to complement	promoting new rail links where a good case can be made and funding is available. Having
the Silvertown Tunnel	reviewed the suggestions for complementary public transport schemes made by respondents
une divertewit turiner	to the consultation, we have concluded that our application for powers to build the Silvertown
We received a range of	Tunnel should not also include powers to build a new rail link, including a DLR link within the
suggestions for new rail links that	tunnel itself. While they may be worthwhile schemes on their own merits, they would not
respondents wished us to consider	assist in resolving the issues of resilience and congestion at the Blackwall Tunnel. The
as complementary schemes to the	Silvertown Tunnel would however give us opportunity to greatly improve the cross-river bus
Silvertown Tunnel. These	network in east London. We continue to develop our proposals for bus services that could
included a new DLR link to be	use the Silvertown Tunnel, though the detailed planning of new routes is likely to take place
incorporated within the tunnel,	much closer to the time of scheme opening. We will include further details in our next
although there were also	consultation, planned for autumn 2015.
suggestions for rail, DLR or	ochounduon, plannou for autanni 2010.
Underground schemes elsewhere.	
Some respondents suggested that	
we should develop a public	
transport alternative to the	
Silvertown Tunnel; however these	
comments are dealt with in the	
section 'Alternatives to the	
Silvertown Tunnel'.	
Suggestions for new bus links to	The Silvertown Tunnel would create significant opportunities for new public transport
complement the Silvertown Tunnel	connections. With substantial numbers of new jobs and population anticipated north and
	south of the river in east London, the tunnel will enable new cross-river bus services to link
We described in our consultation	growth areas, and provide new bus connections to major rail interchanges. We will take
materials that the Silvertown	account of the suggestions for new cross-river bus links as we continue to develop our
Tunnel would give us an	proposals for bus services that could use the Silvertown Tunnel, though the detailed planning
opportunity to introduce new	of new routes is likely to take place much closer to the time of scheme opening. We will
cross-river bus links in east	include further details in our next consultation, planned for autumn 2015.

London. We received a very wide range of suggestions for potential new cross-river bus links.

Some respondents commented in more general terms, for example by suggesting that any new services should use buses with the latest engine technology, as a means for further reducing harmful emissions. In other cases, respondents commented about the infrastructure that could be implemented to support any new bus services, such as bus priority measures at nearby junctions.

We recognise the need to ensure that harmful emissions from the bus fleet are reduced as much as possible and we are introducing new diesel-electric hybrid and other ultra low-emission vehicles as quickly as possible. London already has one of the lowest-emission bus fleets in the world and initiatives such as the Ultra Low Emission Zone in 2020 will lead to improvements across the fleet in addition to those already planned. By 2016 there will be more than 1,700 hybrid buses in service on London's roads representing 20 per cent of the total bus fleet, with almost 40 per cent by 2020. TfL has also completed an extensive retrofit programme of over 1,000 older buses, with plans for a further 800 to be retrofitted. TfL is also trialling zero emission (at tailpipe) electric and hydrogen buses on certain routes. While it is too early to confirm what specific vehicles might be in operation in future years with the Silvertown Tunnel, we will continue to look for every practical opportunity to reduce harmful emissions from the fleet.

It is also too early to say if additional bus priority measures would be required on junctions approaching the Silvertown Tunnel. As we continue to develop the Silvertown Tunnel scheme, we will explore whether any further measures to protect bus journey times and reliability would be necessary.

Enhancing cross-river bus links in east London before the Silvertown Tunnel is built

Some respondents commented that they felt TfL could and should introduce new cross-river bus links in east London in advance of the opening of the Silvertown Tunnel.

The bus network is kept under regular review by TfL and a number of recent enhancements have been made, including enhancements to the capacity of bus routes serving the Greenwich Peninsula. For example the frequency of route 108 – the service which uses the Blackwall Tunnel – was enhanced in September 2014 to provide additional capacity on the busiest section between Blackheath Royal Standard and North Greenwich. We will continue to keep the route under review. However, the height restriction at the Blackwall Tunnel means it is not possible to introduce double-deck buses on this route as a means of further increasing capacity.

The persistent congestion at the Blackwall Tunnel significantly disrupts bus services across a wide area. This disruption affects route 108 most particularly, requiring that that additional bus resources be incorporated within the route schedule to ensure it can operate reliably. These additional resources would also be required for any new bus services if introduced to operate

	via the Blackwall Tunnel today. The Silvertown Tunnel would help to resolve the congestion at the Blackwall Tunnel and so avoid the need for these additional resources, which could be used to much better effect elsewhere.
Comments about the Emirates Air Line cable car  Some respondents commented about the cost to use the Emirates Air Line service. Others expanded on this point by suggesting that the Emirates Air Line should be fully integrated with TfL's Oyster card network.	We explained in our consultation materials that even with dedicated provision for pedestrians and cyclists (which would be necessary for their safety) the Silvertown Tunnel would not be an attractive place to walk or cycle through, and it was in recognition of this that in 2012 we introduced the Emirates Air Line cable car.  Oyster Pay-as-you-go is already accepted on the Emirates Air Line and provides a discount to the standard fare. We are considering what further steps we can take to support walking and cycling journeys in the areas each side of the river, and we will provide a further update in our next consultation, planned for autumn 2015.
The effect on pedestrians and cyclists of changes to the road network to connect the Silvertown Tunnel to the existing road network  We received a range of comments about the effect that the scheme	We are taking account of journeys made on foot and by bicycle in developing our proposals for new junction 'tie-ins'. We are undertaking a further, more detailed assessment of the likely effects of the Silvertown Tunnel scheme on the operation of junctions across a wider area of east and south-east London, including an assessment of potential impacts on pedestrians and cyclists. We will continue to consider how best to accommodate cyclists and pedestrians within our plans for new junctions and will provide further details in our next consultation, planned for autumn 2015.
could have on walking and cycling journeys. Some respondents commented on our initial plans for new junction 'tie-ins' on the north and south sides, to link the new tunnel to the existing road network. These included suggestions that the existing Boord Street footbridge should be	During construction of the Silvertown Tunnel it will be necessary to remove the existing footbridge across the A102 at Boord Street so that we can undertake work to the carriageway beneath it. We will replace the footbridge with a new structure that will be easily accessible. We considered whether the footbridge could be replaced with a surface-level crossing but concluded that since the A102 at this point will be wide and used by a large number of vehicles, a footbridge would be the most appropriate form of crossing, not least in terms of pedestrian safety It will be relocated slightly further south to better serve pedestrians.

replaced with a surface-level crossing. Other respondents queried what effect changing traffic flows might have on walking and cycling trips elsewhere.

Allow pedestrians and cyclists to use the Silvertown Tunnel

We explained in our consultation materials that the Silvertown Tunnel would not be a comfortable place to walk or cycle through and that pedestrians and cyclists would not be permitted to use the Silvertown Tunnel. We explained that the Emirates Air Line cable car had been introduced to provide a means of crossing the river in this location. Some respondents asked that we reconsider this.

As set out in the Mayor's Transport Strategy, the Emirates Air Line cable car was introduced to provide a convenient crossing for pedestrians and cyclists between the Greenwich Peninsula and the Royal Docks. We will put forward steps to support walking and cycling journeys in the areas on each side of the river, and we will provide a further update in our next consultation, planned for autumn 2015. These will be in addition to our plans to introduce new cross-river bus services through the Silvertown Tunnel.

We have also examined again the possibility of directly providing space for pedestrians and cyclists within the new tunnel. Any provision for cyclists and/or pedestrians within the Silvertown Tunnel scheme would require segregated space to be found, as it would be unsafe for pedestrians or cyclists to share an enclosed space with traffic.

We therefore considered two alternative options. One option would be to build a separate bore in the tunnel, and include facilities for pedestrians and cyclists within it. We also considered using the space beneath the road deck for pedestrians and cyclists only. Of these options, it would be more feasible to provide space beneath the road deck, however it would not be a pleasant place to walk or cycle. It would be exposed to significant noise from the road above, for example. The tunnel itself will be around 1.4 km long, which is almost four times longer than the Greenwich Foot Tunnel. If a designated foot/cycle facility beneath the road deck was provided it would be by far the longest in the UK (and could also be the longest in the world), and be challenging to build. Such an approach would also increase the diameter of at least one of the tunnel bores and so increase construction costs of the tunnel significantly. There would also be significant safety and security concerns.

In reality, few cyclists and an extremely small number of pedestrians would be likely to use a facility within the tunnel given that it would be much quicker to cross the river via the Emirates

Air Line, which provides connections to key areas each side of the river. Having carefully considered these issues, we have concluded that the Silvertown Tunnel should not include
provision for cyclists and pedestrians within the tunnel itself.

## User charging

leave valeed	0
Issue raised	Our response
Build the Silvertown Tunnel	User charging at the Blackwall and Silvertown Tunnels will play a fundamental role in
without charging motorists to use it	managing demand for the crossings. This would ensure that when the new tunnel opens,
	demand for the crossings is at a level that the local road network can accommodate, so that
Some respondents commented	the benefits of the additional crossing are fully realised. A further issue is that TfL does not
that, although they supported the	have the funding available to build the Silvertown Tunnel. We have considered various
Silvertown Tunnel and felt it was	funding options, including seeking the necessary funding via business rates or approaching
necessary, they were opposed to	Government, however even if we were successful in seeking funding from elsewhere, the
charging motorists to use it.	need to manage demand for the Silvertown Tunnel would remain crucial. To achieve this
	objective we would need to charge motorists to use the tunnels even if we could find the
	funding necessary to build the new tunnel from elsewhere.
	The user charge would ensure that those who benefit most directly from the Silvertown Tunnel
	would pay for it to be built. The charge would also provide a long-term source of funding that
	could be used to fund other essential transport improvements in future, once the cost to build
	the Silvertown Tunnel had been recovered.
	the divertown runner had been recovered.
Introduce user charging at other	The crossings at Woolwich and Rotherhithe are already busy during peak periods and are
river crossings, or more widely	some distance away from the Blackwall Tunnel; Rotherhithe Tunnel is over three km to the
across London, in addition to the	west of the Silvertown and Blackwall Tunnels, and the Woolwich Ferry around five km to the
Blackwall and Silvertown Tunnels	east. A trip ordinarily made via the Blackwall Tunnel would hence take considerably longer via
	either the Rotherhithe Tunnel or Woolwich Ferry.
We received a range of comments	
about whether a user charge	Route choices for traffic are influenced by numerous factors, including user charges, but also
should apply at the Rotherhithe	journey length and the potential for delays. Based on our current understanding, we do not
Tunnel and/or the Woolwich Ferry,	expect that a significant number of users of the Blackwall Tunnel would divert to either the
or to river crossings in west and	Rotherhithe Tunnel or Woolwich Ferry to avoid paying a charge at Blackwall or Silvertown.
central London or more widely	For these reasons, and on the basis of current evidence, it is not currently proposed to
across London. Other	introduce user charging at the Rotherhithe Tunnel or Woolwich Ferry. TfL will, however, work
respondents disagreed and	to make improvements at the Woolwich Ferry, in particular to address specific concerns about

wished TfL to rule out introducing the user charge more widely.

its operation and impacts, through the River Crossings programme.

We have proposed introducing a user charge at the Blackwall and Silvertown Tunnels to ensure that when the new tunnel opens, demand for the crossings is at a level that the local road network can accommodate, so that the benefits of the additional crossing are fully realised.

There are no plans at this time to extend the Congestion Charge or introduce London-wide road user charging, including to other river crossings, for example in central or west London. Should any such schemes be progressed in future, the scope for incorporating the charging regime for the Blackwall and Silvertown tunnels within a wider charging regime would be examined.

## Comments about the level of the user charge in future

We received a range of comments about the level of the user charge in future. Some respondents were keen that the user charge be set as low as possible, including that the charge be set at a consistent level throughout the day, rather than at a higher level during peak periods and in peak directions. Others suggested that the user charge should be set at a level that would be most likely to encourage motorists to switch to public transport. Other respondents emphasised the need for the user charge to be flexible,

In our application for a Development Consent Order for the Silvertown Tunnel we will seek flexibility over the exact level of the user charge that motorists would be asked to pay. We will seek powers to set the user charge within ranges and would decide what level would be most appropriate closer in time to the opening of the new tunnel. This flexibility would enable us to set the charge at the optimum level, whilst keeping within defined ranges, and to review and adjust the charging level from time to time to reflect changing conditions.

The persistent congestion at the Blackwall Tunnel significantly disrupts bus services across a wide area. The Silvertown Tunnel would help to resolve the congestion at the Blackwall Tunnel and give us opportunity to introduce new cross-river bus services in east London. These would increase choice for road users. In setting charging ranges we will need to bear in mind that the user charge is necessary to manage demand for the crossings and provide a source of funding to help pay for the construction of the tunnel and its future operation. It also represents a key mitigation for potential environmental impacts.

Significantly more vehicles use the Blackwall Tunnel during peak periods, and demand varies by direction, with demand being highest in the northbound direction in the morning peak and the southbound direction in the afternoon peak. We therefore consider that a charge which varies across the charging day is likely to maximise our ability to strike an effective balance

to ensure it has the desired effect in managing demand for the new crossing within manageable limits.	between the various objectives.
Suggestion for discounts or exemptions to the charge  We received a large number of suggestions for discounts or exemptions to the proposed user charge.	The Outline Strategy for User Charging at Blackwall and Silvertown Tunnels, published in October 2014 as part of the consultation, set out our general approach to charging, including the approach to discounts and exemptions.  We are continuing to consider all of the suggestions for discounts or exemptions to the charge that we received. In doing so it is necessary for us to bear in mind that a main purpose of the user charge is to manage demand for the crossings and ensure that when the tunnel is in operation, demand is maintained at a level that the local road network can reasonably accommodate. The charge also represents a key mitigation for potential environmental impacts.  Our next consultation, planned for the autumn 2015, will set out the outcome of our work.
User charging in future  Some respondents queried what use we might make of the revenue we receive from the charge in future. Others echoed this but asked whether it might be possible to remove user charging in future, once the cost to build the tunnel had been recovered. Many respondents made reference to the Dartford Crossing in this context, and asserted that they had received assurances that the tolls here would be removed once	User charging at Blackwall and Silvertown Tunnels would play a fundamental role in managing demand for the crossings. This would ensure that when the new tunnel opens, demand for the crossings is at a level that the local road network can accommodate, so that the benefits of the additional crossing are fully realised. Given the scale of the growth expected in east London over the next 35 years we cannot foresee a time in future when it would not be necessary to manage demand for the crossings by user charging. There would also remain a need for a revenue stream to maintain the tunnel.  We would however continue to review level of charges on a regular basis once these are introduced. Once the cost of constructing the tunnel has been recovered, and assuming there remains the need to manage demand for the crossings through the user charge, we would use the charging revenue to fund other transport improvements in London; indeed, we reinvest all our revenue to improve transport in London. Our application for a Development Consent Order to build the Silvertown Tunnel will include specific provisions for the user charge, reflecting the importance of charging to the success of the scheme.

the crossings were paid for.	The Dartford Crossings are managed by Highways England, and TfL has no responsibility for them.
Suggestions for alternative funding sources  Some respondents suggested that TfL obtain the funding necessary to build and operate the Silvertown Tunnel from sources other than via the proposed user charge. Respondents suggested that TfL should seek funding from private developers or other investors, or the Treasury.	TfL does not have the funding available to build the Silvertown Tunnel so it is necessary to seek the required funding via other means. We have considered various funding options, including seeking the necessary funding via business rates or approaching Government.  Funding the construction of the new tunnel is only one issue however; we must also find a means to manage demand for the Silvertown Tunnel, to ensure that demand for it is at a level that the local road network can accommodate. To achieve this objective we would need to charge motorists to use the tunnels even if we could find the funding necessary to build the new tunnel from elsewhere.  The user charge would ensure that those who benefit most directly from the Silvertown Tunnel would pay for it to be built. The charge would also provide a long-term source of funding that could be used to fund other essential transport improvements in future, once the cost to build the Silvertown Tunnel had been recovered.
Introducing user charging on a trial basis  Some respondents suggested that we should test the impact of the proposed user charge by introducing it on a trial basis.	Introducing the charge on a trial basis only would not provide the certainty required to make the Silvertown Tunnel scheme viable. TfL would however keep the level of charges under review on a regular basis once they were introduced.

#### Suggestions for alternatives to the Silvertown Tunnel

ICCIIA	raised

New walking and cycling or public transport-only crossings

Some respondents suggested that TfL should consider addressing the issues of congestion and poor resilience at the Blackwall Tunnel by building a new crossing solely for walking or cycling trips. In some cases, respondents suggested that we should invest in a new pedestrian and cyclist crossing to link Rotherhithe and Canary Wharf. Other respondents suggested that we should consider a new public transport crossing, such as an additional rail link.

#### Our response

We considered a wide range of potential alternatives to the Silvertown Tunnel in the process of developing the scheme, including some which were suggested by respondents to the consultation. In assessing these, we considered to what extent these suggestions could address the principal objectives of the scheme, which are to reduce congestion and improve the resilience of the Blackwall Tunnel to incidents, in order to support growth.

Our assessment makes clear that it is unlikely that pedestrian and cyclist only links could address the issues of congestion and poor resilience at the Blackwall Tunnel. The Emirates Air Line cable car was introduced specifically to provide a connection for pedestrians and cyclists only between the same areas that the new Silvertown Tunnel will connect. Through our proposals for the Silvertown Tunnel scheme we will put forward measures to strengthen the role of the Emirates Air Line as a pedestrian and cycle connection here. We are also supportive of wider measures to improve pedestrian and cyclist connectivity. Sustrans – the sustainable transport charity – is promoting a new pedestrian and cyclist bridge to link Rotherhithe and Canary Wharf. We are working with Sustrans to develop their proposal, however it is not a scheme that would address the issues of congestion and poor resilience at the Blackwall Tunnel.

Our assessment also makes clear that public transport links would not sufficiently address the congestion and resilience issues at Blackwall. Trips through the Blackwall Tunnel are made from across a very wide area of east and south-east London and beyond. One or even potentially several new rail links would not directly address the needs of road traffic, and would be likely to have very little impact in resolving the issues of congestion and poor resilience at the Blackwall Tunnel.

For these reasons, and having carefully considered the alternative schemes suggested by respondents, we have concluded that the most appropriate solution to the issues of congestion and resilience at the Blackwall Tunnel is the Silvertown Tunnel scheme and the introduction of the associated user charging regime.

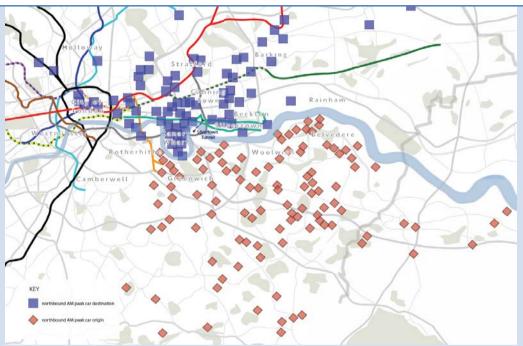
We address below a number of suggestions for specific new rail links raised by respondents to the consultation.

#### An extension of the DLR network to Eltham and Falconwood

We had considered previously the feasibility of incorporating a DLR link to Eltham and Falconwood (south Greenwich) within the Silvertown Tunnel, and examined to what extent this new cross-river public transport link would address the adverse resilience and congestion impacts at the Blackwall Tunnel. Our findings were set out in our 'Assessment of Needs and Options' report, which is available on our website at:

http://www.tfl.gov.uk/cdn/static/cms/documents/st-silvertown-assessment-needs-and-options.pdf

The map below was produced using data from roadside surveys undertaken with a sample of motorists using the Blackwall Tunnel. We asked tunnel users for the origin and destination of their journey, and these are plotted on the map:



Map to show the origin and destination of trips by motorists using the Blackwall Tunnel

We found that only around four per cent of motorists using the Blackwall Tunnel were travelling both to and from an area that would be served by the DLR if it were extended along this corridor. Even on the very optimistic assumption that all of these users would be willing and able to switch to an extended DLR service, this would make only a very small impact on reducing demand for the Blackwall Tunnel, and therefore on relieving congestion at the tunnel.

Incorporating a DLR link within the Silvertown Tunnel would significantly increase the cost of building and operating the tunnel. However, it would do very little to address the issues of congestion and resilience at the Blackwall Tunnel.

An extension of the DLR network to Thamesmead and Abbey Wood

Some respondents suggested that we consider an extension of the DLR network to Thamesmead and Abbey Wood as a complementary measure for the scheme. There is no straightforward link between the Silvertown alignment and these locations, and so we do not propose to take forward this suggestion. However, the Silvertown Tunnel is part of a package of new river crossings for east London, and as part of our wider work we will be considering the case for an extension of the DLR network to Thamesmead and Abbey Wood as part of this work.

#### A new rail link to Barking, Barking Riverside, Thamesmead and Abbey Wood

We are developing proposals to deliver a rail extension from Barking to Barking Riverside, to serve the significant new development that is planned in the area. We previously consulted the public and other stakeholders on these proposals, and further details are on our website: <a href="https://consultations.tfl.gov.uk/london-overground/gobe">https://consultations.tfl.gov.uk/london-overground/gobe</a>. We are giving consideration to future extensions further south to areas such as Thamesmead and Abbey Wood, should it be justified by demand and if funding were secured. We are continuing to develop our proposals; a further consultation is taking place from 11 May to 21 June 2015 and can be accessed here: <a href="https://consultations.tfl.gov.uk/rail/barking-riverside-extension/consult\_view">https://consultations.tfl.gov.uk/rail/barking-riverside-extension/consult\_view</a>

#### An extension of the Jubilee Line to Excel, London City Airport and Woolwich

An extension of the Jubilee Line would not address the congestion and resilience issues currently experienced at Blackwall Tunnel, since it would do little to reduce demand for the tunnel from road traffic. A number of cross-river rail crossings have been delivered in recent years, including DLR extensions to Lewisham and Woolwich Arsenal, the Jubilee line extension to Stratford and the upgrading of the old East London line. Crossrail will provide a further cross-river link between Woolwich, Custom House (DLR) and Canary Wharf (Jubilee line) from 2018.

Alternative road-based schemes

TfL considers that it is necessary to introduce a package of new river crossings to ensure the

There were suggestions that TfL should address the issues of congestion and poor resilience at the Blackwall Tunnel via alternative highway schemes. There were a range of suggestions, including that we should build a bridge at Silvertown rather than a tunnel. Other respondents suggested that we build a new bridge or tunnel elsewhere, or that we should improve the efficiency of the existing road network rather than invest in a new crossing.

efficient movement of road traffic in east London. In addition to the Silvertown Tunnel, we are developing proposals for new bridge or tunnel crossings at Gallions Reach and Belvedere. These additional crossings would improve cross-river connections in east London and support growth. Further information about our proposals for these additional crossings 'east of Silvertown' is available on our website at <a href="https://www.tfl.gov.uk/new-river-crossings">www.tfl.gov.uk/new-river-crossings</a>.

#### Building a bridge at Silvertown

TfL has assessed the feasibility of constructing a road bridge at Silvertown, instead of a tunnel. A number of tall sea-going ships use the eastern reaches of the Thames, and consequently any new fixed bridge constructed to the east of Tower Bridge would need to provide at least 50m of clearance above the high-water mark to allow shipping to pass beneath safely. This requires long, sloping approach ramps to enable traffic to access the main bridge deck. These ramps would require considerable land for construction on each bank of the river; however, this land is simply not available, nor is such a bridge compatible with proposals for redevelopment of the area.

We considered the option of a lower-level 'lifting' bridge at Silvertown. A central section of the bridge could be lifted clear to provide the space for tall ships to pass beneath, so that the approach ramps could be shorter and not need so much land to construct. However, such a bridge would be closed to traffic during those periods when shipping needed to pass. Current data shows that the lifting bridge would need to open frequently – potentially for around 10-15 tall ships per day, with each closure lasting for at least 20 minutes, or longer depending on tidal conditions. Given that ships move with the tide, the bridge might have to close to traffic during the busiest times on the highway network. Traffic would need to be held or diverted to the Blackwall Tunnel during these periods. For these reasons it was concluded that a lifting bridge at Silvertown would be impractical and its contribution to the improvement of road network resilience and journey reliability in the area would be limited. Further information relating to our work in this regard is available from our website:

http://www.tfl.gov.uk/cdn/static/cms/documents/st-silvertown-assessment-needs-and-options.pdf

#### Building a bridge or tunnel at Woolwich

The issues that make construction of a road bridge at Silvertown impractical would also apply to a bridge at Woolwich. In addition, the land on each side of the river at Woolwich is heavily built up, and the land required to build a bridge with the long, sloping approach ramps that would be required is simply not available. A tunnel would also require approach ramps and the topography means that these would be inordinately long and expensive. Again the land required to construct these is simply not available. Further details on our consideration of a new bridge or tunnel at Woolwich are available on our website:

https://delib.s3.amazonaws.com/tfl/east-london-river-crossings-needs-and-options-july-2014.pdf

#### A new tunnel to connect with The Highway (A1203)

Some respondents suggested that we build a new tunnel alongside the Blackwall Tunnel, to connect with The Highway (A1203). Having considered this, we found that such a tunnel would be significantly longer, more expensive and more technically difficult to build than the proposed Silvertown Tunnel. In addition, unlike the Silvertown Tunnel, it would not be well placed to serve the Royal Docks area where significant new development is planned.

#### Build a new crossing over the River Roding

Some respondents asked that TfL build a new crossing over the River Roding, to provide a new link between Creekmouth and Gallions Reach. This would not provide a new crossing of the Thames, and would not address the issues of congestion and poor resilience at the Blackwall Tunnel. In the longer term as the Gallions and Creekmouth areas develop there may be a need for new connections in this area, and the case for a new crossing of the River Roding could be reviewed in this context.

#### Invest in the existing road network

We received a range of comments from respondents who felt that TfL should make

	improvements to the existing road network prior to (or instead of) building the Silvertown Tunnel.  As part of the Road Modernisation Plan, we are investing more than £4bn to improve London's strategic roads. This includes an upgrade of existing roads as well as a programme of major improvement schemes. Further information is available from: <a href="http://www.tfl.gov.uk/travel-information/improvements-and-projects/road-modernisation-plan">http://www.tfl.gov.uk/travel-information/improvements-and-projects/road-modernisation-plan</a> . The majority of local roads in London fall under the responsibility of the respective boroughs, who each have their own programmes for road maintenance or upgrades.  Having carefully considered the alternative suggestions raised by respondents, we have concluded that the Silvertown Tunnel and associated user charging regime would be the most effective solution to the issues of congestion and resilience at the Blackwall Tunnel crossing.
Reduce freight movements by road  Some respondents suggested that we should consider how to reduce the amount of freight moved by road in London.	We work closely with the freight industry and, amongst other initiatives, promote a number of alternative ways to move freight from roads on to other forms of transport, such as river or rail. Further information is available on this topic from: <a href="https://www.tfl.gov.uk/info-for/freight/moving-freight-efficiently/alternative-modes">www.tfl.gov.uk/info-for/freight/moving-freight-efficiently/alternative-modes</a> . However, there remains a road freight transport need for the maintenance of the river crossing at Blackwall Tunnel and for its enhancement as proposed in the Silvertown Tunnel scheme.  We are proposing to use the river as much as possible to transport materials during construction of the Silvertown Tunnel, and we will continue to work with the Port of London Authority in developing our plans. Our application for the powers necessary to build the Silvertown Tunnel will outline our proposed approach to the construction methodology for constructing the new tunnel.
Introduce user charging at the Blackwall Tunnel without building the Silvertown Tunnel, or before the Silvertown Tunnel was open	Although a charge at the Blackwall Tunnel might reduce some demand from motorists — depending on the level at which it was set - it could not prevent planned and unplanned incidents at the tunnel, which is a significant cause of congestion across a wide area. The new Silvertown Tunnel would significantly reduce incidents at the Blackwall Tunnel which force its temporary closure, in particular incidents involving overheight vehicles, and would

Some respondents suggested that we could address the issues at the Blackwall Tunnel by charging motorists to use it, so that it would not be necessary to build the Silvertown Tunnel. Other respondents suggested that we consider charging motorists to use the Blackwall Tunnel before the Silvertown Tunnel was open, for example while the new tunnel were being constructed.

greatly reduce the impact of such closures by providing an alternative route should an incident take place. As London's population grows so the pressure on the road network will also grow. The user charge will need to reflect this fact and be regularly reviewed to ensure it remains effective.

Having carefully considered this issue, we have concluded that the imposition of a charge to use the Blackwall Tunnel without the new tunnel being built, would not be a practical option. This is because it would not address the objectives of reducing incidents at the Blackwall Tunnel and providing more resilience and choice for people crossing the river, or the wider objective of facilitating the forecast growth in the population and economy of east London. While user charging is crucial to manage demand for the Blackwall and Silvertown Tunnels, it will be introduced only once the Silvertown Tunnel is open.

#### Comments about the consultation

Issue raised	Our response
Comments about the information that was published during the consultation  There were a variety of comments about the materials we published during the consultation. Some respondents felt that we had published insufficient information about the scheme or its impacts, while others felt that too much	We recognise that the Silvertown Tunnel scheme will be a major development for London and we must comprehensively explain what impacts the scheme would have and how these might be managed, amongst other issues. We must ensure that the public and other stakeholders feel sufficiently well informed about the project to be able to give us their views about it.  As our development of the Silvertown Tunnel scheme has progressed the amount of information that we can make available has increased. That said, there are certain issues – for example what mitigating schemes will be necessary to manage the impacts of the scheme on nearby road junction – where our proposals are not yet fully developed and so there will inevitably be some areas where less detail is available. As our development of the scheme continues over the course of 2015 we will gain a greater understanding of the impacts of the
information had been made available. Other respondents were critical of the background technical reports that were published to support our consultation materials, and asked that future reports be made simpler and more accessible.	scheme and so can publish more detailed information in support of our next consultation, planned for the autumn 2015.  We recognise also that we must make information about the Silvertown Tunnel scheme as accessible as we can. While there will always be a need for certain background reports to be technical in nature, we will take steps to ensure that the reports we publish during our next consultation are as accessible as possible. These steps could include publishing non-technical summaries and a reading guide to the suite of reports we will publish, explaining the purpose and content of each.
Discussions with key stakeholders  Some respondents were keen either that we discuss the Silvertown Tunnel scheme with them, or that we should discuss the scheme with others, such as the relevant local authorities.	We regularly meet local authorities and other stakeholders, including the boroughs of Greenwich, Newham and Tower Hamlets to discuss the Silvertown Tunnel scheme. We will continue to discuss the project with stakeholders as it progresses in the Development Consent process.

Comments about	TfL's	response
to the consultation	,	

Some respondents commented that they were concerned that TfL may not pay due regard to the issues raised in the consultation.

We place great value in the feedback we receive to consultations and very carefully consider all of the issues expressed to us. We hope that this report – as well as those others we have published following our previous consultations on the river crossings programme makes clear our commitment to considering and responding to all of the issues raised. The Development Consent Order application process will require TfL to set out its response to the issues raised during our formal consultation, planned for the autumn 2015.

## Comments about the consultation process

We received comments about the consultation process itself, including the steps we took to publicise the consultation, the roadshow events we held or the amount of time provided to respondents to comment.

We used a variety of tools to publicise the consultation, including a letter drop to around 500,000 properties in east and south-east London, press and on-line advertising and an extensive email campaign. There were over 4,600 responses from across a wide area of east and south-east London and beyond, suggesting that there was a good level of awareness of the consultation.

We held roadshow events at two separate venues within each of the boroughs of Greenwich, Newham and Tower Hamlets. There were two events at each venue, maximising the chance that interested members of the public could attend and speak to TfL staff about the project. We also attended other meetings when invited and provided that relevant staff were available. We recognise the value of the roadshows and will organise these again during our next consultation, planned for the autumn 2015.

The 'Development Consent Order' process requires that we consult the relevant local authorities on a draft 'Statement of Community Consultation (SoCC)', setting out how we will approach our formal consultation on the proposed Silvertown Tunnel. We have consulted the boroughs of Greenwich, Newham and Tower Hamlets on our draft SoCC, giving local authorities opportunity to influence our approach to the formal consultation. We will publish the SoCC prior to launching the next consultation in the autumn 2015.

## **Economic & development issues**

Issue raised	Our response
Comments about the economic benefits of the Silvertown Tunnel  While some respondents commented that they felt the Silvertown Tunnel would benefit London's economy, others disagreed with this or queried what effect it would have.	<ul> <li>Our response</li> <li>Transport accessibility is widely recognised as a key element in unlocking economic growth. Businesses rely on access to their customers, staff and suppliers to trade. Easy access enables businesses to grow, generating new jobs. Good highway links are particularly important to the distribution, construction and manufacturing sectors, which rely on the road network to access their suppliers and to deliver goods or services to their customers. The Silvertown Tunnel scheme would deliver benefits in respect of all of these objectives</li> <li>We consider that the Silvertown Tunnel scheme would provide a number of key benefits for the economy:         <ul> <li>It would significantly reduce delays, considerably reducing the time users spend delayed in traffic,</li> <li>Create opportunities for new jobs in the local area,</li> <li>The relief of congestion at the Blackwall Tunnel would make the wider area of east London more accessible and attractive to businesses and developers, facilitating and supporting population and economic growth in a part of the city which includes some of the most deprived areas of London, and</li> <li>It would save users money in wasted fuel and other costs by significantly reducing the</li> </ul> </li> </ul>
	number of incidents at the Blackwall Tunnel which restrict its availability to road traffic seeking to cross the river in east London. Providing more reliable journey times would be of particular benefit to businesses, many of which work on a 'just in time' basis.
Comments about the land required to build the Silvertown Tunnel	We only plan to acquire land for the project that we consider is reasonably necessary for its construction and operation. Our aim will be wherever possible to minimise the amount of land

Some respondents commented on the land that would be required temporarily or permanently to build the Silvertown Tunnel, including some concerns raised over impacts on working wharves. that it is necessary to compulsorily acquire. We will continue to work with all of those landowners who may be affected during the continuing development of the scheme.

It is not intended that any existing working wharves will be materially adversely affected during the construction phase of the scheme. TfL is continuing to work with the Port of London Authority to develop the construction methodology for the tunnel, and it is proposed that the river will be used for transporting material where possible.