



Lambeth Bridge north and south

Response to issues commonly raised
March 2020

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Background

Between 26 June and 20 August 2017 we consulted on proposals for changes to the road layout at the northern and southern roundabouts at Lambeth Bridge. We also proposed changes to two approach roads and to the bridge itself. Our plans were presented in five geographic sections to enable us to build a picture of what respondents were concerned about, or talked about in their comments.

We also sought views regarding a potential 20mph zone in the area, the current underpass at Albert Embankment and suggestions for the relocation of the palm tree at Lambeth Bridge north, should the proposals be taken forward.

We received 2,058 responses to the consultation. Of these, 688 responses were generated by email campaigns and 44 responses were received from stakeholders. For more information please see the consultation report which details the processes, responses and outcomes of the consultation in more detail.

As a result of the feedback received in response to our consultation, some changes have been made to the proposals. Further detail about our intended way forward for the scheme is set out below.

Healthy Streets approach

Lambeth Bridge and the junctions either side have been designed with the aims of the Healthy Streets Approach at their heart. The Healthy Streets Approach puts people, and their health, at the heart of decision making. This results in a healthier, more inclusive city where people choose to walk, cycle and use public transport.

The Healthy Streets Approach is not an idealised vision for a model street. It is a long-term plan for improving Londoners' and visitors' experiences of our streets, helping everyone to be more active and enjoy the health benefits of being on our streets.

Eighty per cent of Londoners' travel happens on our streets. The best way to get more people out walking, cycling and using public transport is to improve the quality of the experience of being on those streets. The Healthy Streets Approach focuses on creating streets that are pleasant, safe and attractive, where noise, air pollution, accessibility and lack of seating and shelter are not barriers that prevent people - particularly our most vulnerable people - from getting out and about.

Vision Zero

Vision Zero is at the heart of the Mayor's Transport Strategy (MTS) - a fundamental belief that no death or serious injury on London's roads and transport network is acceptable. We want to create a city where walking, cycling and public transport are the easy, convenient and enjoyable choice for people travelling in London but we know people will only walk and cycle if they feel safe.

The Vision Zero Action Plan, published in July, sets out how we will achieve this by:

- Lowering speeds
- Redesigning streets to reduce conflict between road users
- Allowing only the safest vehicles to use our roads
- Engaging and educating people about travelling safely in London
- Learning from collisions and better supporting the people who have been involved

Survey results

Millbank: thirty-four per cent of respondents supported or partially supported proposals to convert the Millbank north junction with Great Peter Street into a signalised pedestrian crossing. Thirty-eight per cent were opposed or strongly opposed.

Lambeth Bridge north: thirty-seven per cent of respondents supported or partially supported proposals to change the road layout at Lambeth Bridge north. Forty-one per cent were opposed or strongly opposed. Forty-two per cent of respondents supported or partially supported a reduction in the speed limit at Lambeth Bridge north to 20mph, and twenty-five per cent were opposed or strongly opposed.

Lambeth Bridge: forty per cent of respondents supported or partially supported proposals to the road layout at Lambeth Bridge. Thirty-four per cent were opposed or strongly opposed.

Lambeth Bridge south: thirty-nine per cent of respondents supported or partially supported proposals to change the road layout at Lambeth Bridge south. Thirty-seven per cent were opposed or strongly opposed. Forty-one per cent supported or partially supported a reduction in the speed limit at Lambeth Bridge south to 20mph, and twenty-six per cent were opposed or strongly opposed.

Lambeth Palace Road: thirty-two percent of respondents supported or partially supported our proposals to change to the road layout at Lambeth Palace Road. Thirty-four per cent were opposed or strongly opposed.

Conclusion

Following careful consideration of the consultation responses received, our current intention is to progress the proposals as set out below, subject to internal approvals and formal agreements from both London Borough of Lambeth (LBL) and Westminster City Council (WCC). Revised drawings illustrating these changes are available in Appendix A.

Millbank and Lambeth Bridge north: in light of feedback received during the consultation, we have worked with WCC to amend the design to further mitigate concerns regarding possible traffic reassignment onto local roads by retaining:

- the right turn from Millbank south onto Lambeth Bridge at all times of day. In the original proposal it was not possible to turn right from Millbank south onto Lambeth Bridge during the evening peak,
- the left turn from Millbank north onto Lambeth Bridge for all traffic. In the original proposal only buses and pedal cyclists could turn left from Millbank north onto Lambeth Bridge via a slip road.

The latter change also negates any need for changes to Millbank at the junction with Great Peter Street.

Implementing these changes into the design reduces the likelihood of vehicles seeking an alternative route away from the junction and the predicted volume of traffic on local roads in the vicinity of Lambeth Bridge northern junction. However together with WCC we will monitor the impact the changes will have on local roads upon scheme completion to understand the impact on traffic volumes in the area. If shown to be required through the monitoring, a pre-agreed mitigation strategy will be implemented on WCC roads. The details of this are still being discussed.

We are committed to improving the safety of vulnerable road users through making changes to Lambeth Bridge northern junction layout. As such we will replace the originally proposed advisory cycle lanes shown in the consultation with mandatory lanes. However whilst enabling more movements at the junction as described above it has become necessary to introduce staggered pedestrian crossings on both Millbank north and Millbank south. This is to reduce delays to bus journey times whilst continuing to provide a safe means for crossing for pedestrians.

Furthermore after feedback received from the Mayor's Disability Advisory Group the shared-use proposals have been reviewed throughout the design. Cyclists will now stay on the carriageway where it is considered safe to do so. As a result, an internal stop line will be provided on Millbank north to enable cyclists to safely make the left turn which is otherwise banned for other traffic. However, due to space and signal time limitations, the shared-use footway will remain between

Millbank south and Horseferry Road, and a carriageway level cycle track will be provided on the footway between Millbank north and Lambeth Bridge.

Lambeth Bridge: we intend to proceed with our proposals for Lambeth Bridge as set out in our consultation.

Whilst on site we will take the opportunity to upgrade the bridge drainage, expansion joints and waterproofing to increase the longevity of the structure.

Lambeth Bridge south and Lambeth Palace Road: in response to feedback from the consultation, southbound bus stop “Lambeth Palace (SA)” on Lambeth Palace Road will remain in its current location, which provides an unobstructed view from Lambeth Palace to the Palace of Westminster.

In response to queries regarding the safety of vehicles turning right into Lambeth Palace forecourt, we will provide a right turn pocket as well as ‘keep clear’ markings to keep this area unobstructed for turning vehicles. This will require northbound bus stop SP and its shelter to be retained but relocated slightly further north.

Following feedback received from LB Lambeth and the Mayors Disability Advisory Group the shared use proposals have been reviewed throughout the design. Cyclists will now stay on the carriageway where it is considered safe to do so.

In response to feedback, the narrow northbound cycle lane on Lambeth Palace Road will be removed and replaced by a wider traffic lane. A short mandatory cycle lane which feeds into the segregated cycle facility outside the entrance to St Thomas’s Hospital will be provided. It is proposed to convert the existing zebra crossing on Lambeth Road into a parallel pedestrian and cyclist crossing to enable cyclists on Lambeth Road to connect with an existing cycleway on Lambeth High Street.

Protective Security Measures: during the consultation period temporary security measures were installed on Lambeth Bridge in response to the London Bridge terrorist attack. These will be replaced with permanent measures on the bridge, and if required, at the junctions either side.

We will work closely with WCC, LBL and the security services to ensure that any measures do not cause pinch points and are suitable for their historic setting. We will aim to deliver these at the same time as the junction changes in order to minimise construction impact.

Speed reduction: a reduced speed limit of 20mph will be introduced on Transport for London roads within the Congestion Charging Zone as part of Vision Zero (see above), aimed at increasing the safety of people using London’s roads, please see <https://tfl.gov.uk/info-for/media/press-releases/2018/july/mayor-tfl-and-the-met-launch-plan-to-eliminate-deaths-and-serious-injuries-on-london-s-roa>. This will include Lambeth Palace Road, Lambeth Bridge, Millbank South and Albert Embankment. This reduced speed limit will be introduced in March 2020.

Coordination with nearby proposals /schemes: as nearby proposals and developments are progressed we will look to coordinate schemes wherever feasible to do so. The proposals will compliment as far as possible any proposed changes at Parliament Square as both sets of proposals develop further.

Equalities: an Equality Impact Assessment (EqIA) has been carried out for the scheme looking at the impacts on individual groups, including disability groups. This will continue to be kept under review and updated throughout the development of the scheme. Any impacts on groups of people with protected characteristics will be taken into account as part of TfL's decision-making on this scheme.

The new junction arrangements have led to some increases and some decreases in bus journey times. The new signalised junctions are designed to improve safety, in doing so they have removed capacity from some approaches on the network. See Appendix B for more details about the predicted journey time changes.

Moving forward: we are proposing to hold two engagement events to explain the above changes further. These will be held on:

Wednesday 18 March, between 4-8pm at the Parish Sitting Room, St Stephens House, Hide Place

Thursday 19 March, between 4-8pm at the Park Plaza Hotel, Albert Embankment

We will continue to work with WCC and LBL on our proposals and start to produce detailed designs. We will also continue to work with WCC to develop a monitoring strategy on local roads where this is considered necessary. Subject to various internal approvals and formal agreements we aim to start work on site in early 2022, working closely with our stakeholders to do this. We will contact local residents and businesses again to keep them informed of construction timings in due course.

Response to issues commonly raised

The main comments we have received in response to this consultation have been categorised into themes. Our response to the key issues raised is set out below.

1. Current road layout

1.1 Lambeth Bridge north

The existing roundabout at Lambeth Bridge north has already been changed, works well, and alleviates some safety concerns. The new proposal is overly complicated and should be left alone. Could the interim measures be refined to offer further benefits, at a lower cost?

Changes to the roundabout at the northern junction were made in March 2017. This was an interim scheme that enabled short term safety improvements to be installed quickly before a longer-term, more transformative scheme could be further investigated and implemented. A variation of this interim scheme went to public consultation in October 2012. The main feedback received was that the measures proposed were insufficient to significantly improve the safety record for cyclists at the junction. This feedback led us to look further at the junction and culminated in the proposed design options consulted on in June - August 2017.

The primary objective of this scheme is to create a road environment at Lambeth Bridge that is safer for vulnerable road users of all abilities. The interim scheme delivered low impact changes whilst keeping the un-signalised roundabout in situ. Although an improvement, the current layout of the junction does not fully achieve this objective. Any higher level of design intervention requires a re-work on the scale of the scheme we are now proposing.

1.2 Current traffic flows

We were asked to provide details about traffic flows for each junction. A sample of the total traffic flow for each roundabout is outlined below and separated out into different modes. This scheme has progressed over several years, with the most recent traffic survey being carried out on Tuesday 9 June 2015. Spot counts after this date have been carried out to ensure the data is still accurate. This data is representative of general movements and total flows for each junction between the morning peak hour (07:30 - 08:30) and the evening peak hour (18:00 – 19:00).

<i>Lambeth Bridge</i>	Cars & Light Goods Vehicles	HGVs	Bus	Coach	Motorcycle	Pedal cycle	Taxi
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North am peak	1,302	214	83	35	424	1,744	188
North pm peak	1,508	54	103	35	420	1,934	337
South am peak	1,511	265	105	25	495	1,146	168
South pm peak	1,717	72	112	45	432	1,054	300

2. The new road layout

2.1 General comments

The new road layouts may make it difficult to find your way. Some respondents would like to see advanced warning signs and route information provided to guide people visiting Kings College, Guys Hospital and the soon to be constructed Lambeth Palace's Archives

When implemented advanced signage will be amended to reflect the revised road layout. There are several destinations which attract high numbers of visitors in and around the Lambeth Bridge area. If each were signposted it would create a high number of additional signs on the network which not only adds to street clutter but may also detract from those markings or signs which legally and/or for safety reasons, need to be adhered to. For this reason no additional advanced signage will be provided to specific destinations.

2.2 Impact on local residents

How many local residents or other members of the community would benefit from these proposals?

Residents who cross the bridge or its junctions will be the beneficiaries of the scheme.

Both roundabouts and Lambeth Bridge are currently dominated by motor traffic and can be intimidating and unpleasant places to walk and cycle. By giving cyclists space and/or time to pass through the junctions and across the bridge, and by providing new signalised crossings and wider footways at the junctions for pedestrians, we can encourage more people, including residents, to use these healthy and sustainable forms of transport, whilst keeping other traffic moving.

The proposals align to the Mayor of London's long-term vision to encourage more Londoners to walk and cycle by making London's streets healthier, safer and more welcoming. This is useful for residents if they cycle or walk to work or to local destinations.

Improving the area for walking and cycling will not only benefit those who use it now, but could also serve to increase the levels of physical activity in the area.

The proposals show bias in favour of commuters and able-bodied cyclists. The needs of local residents and those that are less able or are wheelchair or pushchair users have not been considered

New signalised crossings will be provided at both Lambeth Bridge North and Lambeth Bridge South to create dedicated time for pedestrians to cross the carriageway safely. At the northern junction this more formalised crossing arrangement replaces existing zebra crossings which rely on motor vehicles to notice and give way to waiting pedestrians.

Where these crossings are to be performed in two stages (staggered crossings) the waiting space in the middle of the crossings is of sufficient width to accommodate those with pushchairs or using wheelchairs. The footways at the junctions have also been widened to allow a more pleasant space for pedestrians to move through.

The footway width on Lambeth Bridge is being reduced from 3.6m to 2.5-2.7m to enable a new cycle track to be accommodated. However this is of sufficient width to enable two wheelchair users to pass one another.

An EqIA has been undertaken on the scheme, identifying the impacts on individual groups of people with protected characteristics, please see page 6.

If relatively few or no locally elected representatives are supportive of the plans for Lambeth Bridge north, then it would seem that the majority of people are satisfied with the current layout

Feedback received from local elected representatives and other stakeholders that responded to the consultation is contained within the consultation report that accompanies this document. The consultation report details their levels of support and opposition for the proposals, and the reasons behind these.

The proposed improvements are for all those that use the junctions, both now and in the future. This includes residents as well as commuters, tourists and other road users.

2.3 Changes to the road layout at Millbank

Does the zebra crossing at the Great College Street junction with Millbank impact on the feasibility of the proposed signalised crossing at Great Peter Street?

Due to feedback received during the consultation, changes are no longer proposed at Great Peter Street. Please see page 5.

2.4 Changes to the road layout at Lambeth Bridge north

A yellow box junction should be considered to reduce the risk of the junction blocking up as it merges into single lanes

Currently there is no plan to introduce a yellow box road marking at this junction. Our traffic modelling results do not indicate that 'exit blocking', where vehicles continue to queue through the junction, would occur. Once implemented, queuing will be managed with intelligent traffic signals whereby sensors and artificial intelligence are used to balance traffic flow through the junction. However, we will monitor the situation and consider appropriate measures if the circumstances require it post implementation.

Some noted the removal of the roundabout created enough space to allow left and right turns at the junction. This being the case, why is it necessary to introduce restrictions?

The restrictions are in place to provide sufficient time for cycle and pedestrian movements to take place independently of motorised traffic movements, enabling a safer passage through the junction for these user groups. Re-introducing all left and right turns for traffic would result in significant delay for all road users and is likely to lead to traffic diverting onto local roads or longer queues unless people choose to change how or when they travel. However, in response to feedback from the consultation we have introduced both the left and right turns onto Lambeth Bridge into the design for all traffic at all times of day, please see page 5.

A roundabout is preferred at Lambeth Bridge north. Why was a Dutch style roundabout not proposed as it seems to be the perfect location for one?

We considered a number of designs at Lambeth Bridge north including a 'Dutch style' roundabout with a physically segregated cycle track around the outside and zebra and cycle priority crossings on all the approaches. This design was modelled in detail using simulated traffic. Due to the high numbers of cyclists and pedestrians in peak hours, modelling predicted that it would become difficult for traffic to move through the roundabout. This resulted in predicted delays in excess of 15 minutes for bus services which was considered unacceptable.

Having considered a number of designs, we believe that the proposed layout of a signalised crossroads achieves the best balance for all road users.

Zebra crossings are preferred at Lambeth Bridge north. Can these be retained to avoid delay to pedestrians?

In developing our proposals we tested a wide variety of junction layouts. A signalised junction design with zebra crossings on the approaches was considered but deemed too confusing and disruptive to traffic flow to progress. It also posed a safety risk as vehicles are likely to be focussed on the traffic signals and not aware of pedestrians preparing to cross at the zebra crossings.

The shared bus and cycle slip lane from Millbank north to Lambeth Bridge looks unsafe for cyclists/cyclists should not have their protection interrupted

This feature has been removed from the design in response to feedback received from the consultation. Under the revised proposals all traffic can now turn left from Millbank north on to Lambeth Bridge. There is now a proposed carriageway level cycle track through this area. Please see Appendix A for the revised design layout.

How has the scheme taken future plans into consideration? For example there are proposals to pedestrianise Abingdon Street and Old Palace Yard and the area will soon welcome a Holocaust Memorial in Victoria Tower Gardens

We have included consented planning applications in our traffic assessments and are working closely with the team considering the future of Abingdon Street and Old Palace Yard. Should proposed developments such as the Holocaust Memorial proceed, we will aim to ensure our proposals complement one another as far as possible.

2.5 Changes to the road layout at Lambeth Bridge south

We should consider two lanes leading from Albert Embankment to the junction (straight ahead and right-turn only) to marginally reduce the risk of conflict between road users

The lane allocation has been provided to adequately serve the volume of traffic using the junction. This is based on site surveys and turning counts undertaken in June 2015.

Concern about the lack of vehicle access to Lambeth Palace

Access to Lambeth Palace will remain via Lambeth Palace Road. We have amended the design to provide a right turn pocket for vehicles turning into the Palace forecourt as well as 'keep clear' markings. Please see Appendix A for the revised design layout.

We have had discussions with the Church Commissioners and Lambeth Palace regarding the closure of one of the two existing accesses. We will continue our discussions as the project progresses.

Heading eastbound into Lambeth Road - the merged lane arrow should be replaced with hatching from the new pedestrian island to clearly indicate that the road narrows and vehicles do not have two lanes

Only one lane of traffic enters Lambeth Road at any one time so vehicles will not be two abreast. The merge arrow has therefore been removed from the design. Please see Appendix A for the revised design layout.

2.6 Changes to the road layout on Lambeth Bridge

The new road layout on Lambeth Bridge may affect emergency services response times / restrict emergency vehicles getting across the bridge during heavy traffic. For example, large appliances would have difficulty getting through two lanes of stationary traffic.

The number of traffic lanes on Lambeth Bridge is not changing, there is currently a bus lane and a general traffic lane southbound and a general traffic and mandatory cycle lane northbound. In the proposals there continue to be three running lanes on the bridge, one northbound, which expands to two lanes at the northern junction and one southbound lane which again expands to two southbound lanes at the southern junction.

Both prior to and during the public consultation the proposals were developed in full consultation with representatives from the Police and other emergency services. It is considered emergency vehicles will find it easier to pass stationary traffic on Lambeth Bridge under this proposed design as there will be three running lanes open to all traffic. In the existing situation vehicles are reluctant to make space for emergency vehicles if it means entering the bus lane.

3. Cycling

3.1 Connectivity and growth

This scheme should be designed to address the growth in the number of people cycling

Our proposals accommodate the current volumes of cyclists and have been designed to accommodate a reasonable growth in cycle volumes.

Will any modal shift to cycling in the Lambeth bridge area be measured once the changes are made, in particular by a wider demographic?

Post construction there will be a comprehensive approach to monitoring the benefits of the scheme. This will include carrying out traffic counts to understand how travel patterns have changed and how many people are choosing to walk or cycle in the proposed layout compared to that existing.

Is there scope for the scheme to improve connectivity between Westminster and the East-West Cycle Superhighway

This proposal connects to CS8 at Lambeth Bridge northern junction. Enabling the connectivity between Lambeth Bridge North and the East- West Cycle Super Highway is outside the scope of this scheme and will be considered by the team looking at Abingdon Street and Old Palace Yard.

3.2 Cyclist behaviour

Some cyclists do not adhere to road rules or use cycle lanes and the proposals may encourage this if the journey times take longer

Cyclists are required to observe the Highway Code, like all traffic. The proposal introduces facilities that make cycle manoeuvres safer such as cycle lanes and two stage right turns. Such measures may prevent cyclists trying to jump the traffic lights to perform manoeuvres ahead of others at this busy junction.

Some of the proposed measures may make cycle journeys quicker and provide cyclists with a more direct route so there is limited benefit to them in avoiding these dedicated cycling facilities. The likelihood of cyclists using the facilities is more encouraged owing to the poor safety record of the junction.

3.3 Cycle bypasses and shared use facilities

The cycle bypasses may lead to pedestrian and cyclist conflict, for example, the area between Lambeth Bridge and Lambeth Palace Road is steep and short. Cyclists would descend the bridge at speed leading to increased chance of pedestrian conflict

Following feedback received from the Mayor's Disability Advisory Group, shared use footways have been removed from the design where it is considered safe to do so, please see page 5. There will not be any shared use facilities proposed at Lambeth Bridge southern junction. There is however one corner of Lambeth Bridge northern junction footway where shared use is still proposed, between Millbank south and Horseferry Road. This will retain a footway level cycle bypass to guide cyclists through the area which will look different in colour or texture to the footway. The angle at which cyclists are invited to enter the footway will be considered to help them slow naturally without being so severe to make them unstable on their bikes. Please see Appendix A for the proposed layout.

This footway is being widened to provide more space for pedestrians and cyclists. As a result of the wider space, the visual differentiation and naturally having to slow the interaction between pedestrians and cyclists is thought to be acceptable.

Similar arrangements can be seen working well in other locations popularly used by both cyclists and pedestrians for example Pitfield Street and Great Eastern Street in Hackney.

There is also a carriageway level cycle track at Lambeth Bridge northern junction, between Millbank north and Lambeth Bridge. This will have informal crossing points to enable pedestrians to cross the cycle route.

Left turn cycle bypasses are welcomed, however a bypass is also needed from Albert Embankment to Lambeth Bridge as this turn is particularly dangerous

Following feedback received from the Mayor's Disability Advisory Group, shared use footways have been removed from the design where it is considered safe to do so, please see page 5. The only shared use area remaining in the design is between Millbank south and Horseferry Road.

Between Albert Embankment and Lambeth Bridge, cyclists will be separately signalled to avoid conflict with motor vehicles.

What measures can be taken to prevent traffic undertaking banned manoeuvres, including across cycle lanes?

Once implemented, we can monitor activity at the new junction layouts and use enforcement powers where necessary to prevent vehicles undertaking banned movements, including those where they enter a mandatory cycle lane or footway space.

3.4 Two-stage right turn manoeuvres for cyclists

Innovative designs are being implemented to transform cycling in London and transform the environment for all road users.

Two-stage right turn manoeuvres are demonstrated on our web page here: <https://tfl.gov.uk/corporate/safety-and-security/cycle-safety-innovations>

Cyclists prefer taking right-turns from the centre of the road as this reduces journey times. The use of two-stage right turns should be surveyed before more are implemented. More experienced cyclists won't use these due to the delay

The two-stage right turn facility enables cyclists of all abilities to turn right safely and where feasible these have been provided within the design. Confident cyclists

are welcome to turn right with motorised vehicles; however they will need to position themselves in the general traffic lane on the approach to the junction.

The likelihood of cyclists using the two-stage right turn facility is more encouraged owing to the poor safety record of the junction.

The two-stage right turn enables the junction operation to run at its most efficient with the least number of traffic stages to service all movements and allows us to balance the needs of all those who wish to use the junctions.

We have successfully implemented two-stage right turns at other locations on the network, such as at Oval junction to address the risk of similar right turn collisions occurring. Whilst these are still relatively new features, they have significant advantages from a cycle safety and operational perspective.

The two stage right turn manoeuvres for cyclists at each arm of the junction will be confusing for inexperienced cyclists

These facilities are becoming more commonly used around London. An example of a similar facility working well is at Blackfriars Road. Signage is also installed at junctions to guide cyclists on how to navigate these facilities.

There is not enough space in the junction for cyclists who are waiting to complete a two-stage right turn movement

Right turning cyclists are able to make the right turn movement in two stages. Traffic modelling has indicated that the two-stage right turn 'pocket of time' is large enough to cater for the number of cyclists expected to make this movement.

3.6 Early release cyclist traffic lights

Early release cyclist traffic lights are demonstrated on our web page here:

<https://tfl.gov.uk/corporate/safety-and-security/cycle-safety-innovations>

Early release designs do not represent appropriate cycling infrastructure for cyclists of all ages. These should be designed to remove collision risk from other turning vehicles when the lights are green

The Early Release design is used in situations where the preferred fully segregated alternative is not possible owing to the greater impact to general traffic and buses, insufficient road width and/or the inability to remove traffic movements. The function does provide an advantage to cyclists at the stop line.

3.7 Cycling facilities at Millbank

Consider changes to the road layout or the introduction of 'floating bus stops' where cyclists pass between bus stops and the pavement so that

cyclists do not have to merge to the right when entering Millbank towards Parliament Square

Owing to the presence of four mature trees and the zebra crossing by Dean Stanley Street, there is insufficient space for a floating bus stop. When the bus stop is not occupied, cyclists can continue parallel to other traffic, towards Parliament Square. When a bus is using the stop, cyclists will need to adopt a primary position to overtake the stationary bus.

Advanced Stop Lines (ASLs) and feeder lanes are needed along Millbank (north and south) in particular at Great Peter Street and just south of the shared bus and cycle lane from Millbank north to the bridge

Proposals at Millbank junction with Great Peter Street have been removed from the design, please see page 5.

Wherever possible cyclists have been separated in time and space from general traffic. Where it is possible to separate cyclists in time and space there is no requirement for an ASL. Where it has not been possible to separate cyclists in time and space ASL's have been provided, as can be seen on Lambeth Road and Lambeth Bridge at the southern junction.

The exception to this is Horseferry Road, where general traffic is only permitted to travel ahead, there are therefore no conflicting movements that would require an ASL. The carriageway space is wide through the junction and at the exit giving cyclists enough space to go from the cycle lane Horseferry Road to the cycle lane on Lambeth Bridge.

Consider moving the central taxi rank at Millbank to provide more room for cycling facilities

We are not considering the central taxi rank on Millbank as this is not within the scope of the scheme or consultation.

3.8 Cycling facilities at Lambeth Bridge north

Advisory cycle lanes are not appropriate at this location. Provide physical separation methods

Unfortunately there is insufficient space to physically segregate cyclists from general traffic on the approaches to the junction. However the proposed advisory cycle lane on Millbank will be replaced with a mandatory cycle lane to provide further protection for cyclists.

Could a segregated cycle lane be considered to connect Cycle Superhighway 8 and Lambeth Bridge with Waterloo Bridge?

This suggestion is not within the scope of this scheme or consultation. However, a cycle route has been proposed parallel to Millbank up to Waterloo Bridge. This was consulted upon in 2015, details of this can be found here:

<https://www.westminster.gov.uk/quietway-route-fitzrovia-pimlico>

3.9 Cycling facilities at Lambeth Bridge south

The designs for Lambeth Bridge south unfairly impact cycle flows when compared to other traffic

We consider that cyclists will have enough green signal time to travel through the junction. Cyclists turning right from the cycle lanes will need to do so via a two-stage right turn. We feel the safety benefits of this operation justify the increase in time needed to undertake the manoeuvre.

Many cyclists head over Lambeth Bridge from Lambeth Road. Consider widening the ASL to the pedestrian island to remove the risk of conflict with vehicles turning left to Albert Embankment

The design provides a seven and a half metre deep ASL, where cyclists will stop in front of the left turn conflict area when under a red signal. This is considered deep enough to accommodate the expected number of cyclists. Cyclists will be approaching from the nearside feeder lane and are unlikely to benefit from a wider waiting area.

When travelling ahead from Lambeth Road, cyclists are likely to keep to the left to align themselves with the cycle lane at Lambeth Bridge. If turning right from Lambeth Road, cyclists are encouraged to use the two stage right turn facility, also requiring cyclists to keep left to position themselves correctly to undertake this manoeuvre.

Cycle logos in the centre of the junction could lead cyclists to take a poor cycling position in the road. To address this cycle lane road markings should continue throughout the junction

A consistent and thorough way-finding strategy will be investigated during the next stage of the scheme.

Floating bus stops should run through the proposals as standard, particularly for Lambeth Road and Lambeth Palace Road

There are several mature trees and a lack of road space which prevent the provision of floating bus stops on Lambeth Palace Road.

The scope of the scheme does not include alteration to any of the bus stops on Lambeth Road.

3.10 Cycling facilities along Lambeth Palace Road

There was opposition to the removal of the cycle lane along Lambeth Palace Road, and concern over the lack of physically protected space

The northbound cycle lane on Lambeth Palace Road will remain as existing, please see page 6. Cyclists can continue to use the southbound bus lane on Lambeth Palace Road which will be widened to provide additional space.

4. Traffic impacts

4.1 Congestion

The proposals will increase traffic congestion and journey times and cause traffic to queue on all approaches to the junctions

This design is in accordance with the Healthy Streets approach in terms of encouraging people to use active transport. We feel the design strikes an appropriate balance between maintaining traffic operations for all modes whilst creating a much safer and less intimidating environment at a location with known safety issues for vulnerable road users.

The junction changes are predicted to affect traffic flows and journey times. These predictions are derived from advanced traffic demand modelling, which accounts for changes in London wide traffic demand as well as proposed changes to London's road network.

Due to the introduction of signalised junctions and separate traffic signals for cyclists and pedestrians, some journey times may get shorter whilst others may experience peak time traffic queues and their journey times will increase. Traffic signal timings can be adapted by time of day in order to manage changes in vehicle flows and reduce queueing as much as possible. Please see Appendix B for a table showing likely journey time impacts updated to reflect changes made since consultation.

Concern the roadworks required to change the junctions will cause further unnecessary disruption, particularly taking into account other construction work taking place in the area

Any works on the roads as well as development works near the junctions will be co-ordinated as far as possible to limit the impact on road users and residents.

Concern with the impact banned turns will have on local roads that were not designed for extra traffic. What mitigations are in place to address

anticipated problems with increased traffic, as careful before and after analysis will be required

In response to feedback from the consultation, two turning movements have been reintroduced into Lambeth Bridge northern junction to reduce the likelihood of vehicles seeking alternative routes away from the junction, please see page 5. However when changes are implemented some traffic may still seek alternative routes to avoid the junction, or approach it from a different direction to continue their journey through the area. Whilst a significant increase in traffic on these roads is not expected, we will support WCC in monitoring any impacts on the local road network and implementing mitigation measures where necessary. Examples could include speed restrictions, traffic calming measures, and further banned turns.

4.2 Journey times

Public transport should not be delayed. Can measures to make up for bus journey time delays be introduced before these proposals are implemented?

Updated details of predicted journey times can be seen in Appendix B. Where possible we have introduced measures to protect bus journey times within the design, such as lengthening the bus lane on Lambeth Palace Road.

We are continuing to work with London Buses to investigate any mitigation measures on those routes whose journey times are likely to increase to ensure bus passengers will not be unduly affected by the changes proposed. This is likely to include measures outside of the scheme area.

4.3 Traffic impacts in general

Proposals will increase traffic congestion and journey times, affecting the free flow of traffic

This design is in accordance with the Healthy Streets approach in terms of encouraging people to use active transport, making active transport safer, which will affect journey times. The effect on journey times is considered with the safety improvements that need to be made. See also first answer at paragraph 4.1.

4.4 Traffic impacts at Lambeth Bridge north

If traffic on local roads around Westminster increases due to the number of banned turns, what measures can be taken to make Tufon Street, Great College Street and Dean Bradley Street safer for pedestrians and local school children?

Due to feedback received during the consultation the left and right turns onto Lambeth Bridge have been re-introduced into the design, please see page 5. This will reduce the likelihood of vehicles seeking alternative routes away from the junction.

However, as previously mentioned in 4.1 we will support WCC in monitoring any impacts on local roads and implement mitigation measures as required. Details of this are yet to be finalised.

4.5 Traffic impacts at Lambeth Bridge south

The introduction of a banned left-turn from Lambeth Palace Road onto Lambeth Road, and the banned right-turn from Lambeth Road onto Lambeth Palace Road will have an impact on traffic levels on local roads in Lambeth. Is the impact of this fully understood - in particular for Black Prince Road?

We have captured all proposed banned turns and volumes of vehicles currently using them in our traffic reassignment model to understand where the displaced traffic flows are likely to re-route to. In this case the demand for these turning movements is low. Analysis shows that any changes to vehicle flows along Black Prince Road and other LBL roads is likely to be small as a result of banned turns at Lambeth Bridge southern junction. Our models suggest that south of the river vehicles are likely to reroute to the more major Transport for London road network and to a lesser extent the A23 northbound (Kennington Road). However if the proposed scheme is constructed and there is a significant increase in traffic on Black Prince Road, we will support LBL in implementing local road mitigation measures. Examples could include speed restrictions, traffic calming measures, and further banned turns.

TfL is currently in discussions with Lambeth Fire Brigade (LFB) in regard to the redevelopment of 8 Albert Embankment and their current use of the left turn from Lambeth Palace Road into Lambeth Road. We are committed to working with LFB to seek a satisfactory resolution which meets Lambeth Council's planning condition

5. Environment

5.1 Air quality

The scheme will potentially put the health of people in areas affected by increased traffic flows (primarily the young and elderly) at risk by increasing their exposure to higher levels of air pollution

We take the matter of London's air quality very seriously and are working with the Mayor and the London boroughs to build on and introduce a range of measures aimed at improving air quality as part of the Mayor's Clean Air Action Plan. More information can be found on our web page here <https://tfl.gov.uk/corporate/about-tfl/air-quality>

The designs for Lambeth Bridge north and south are not expected to increase the number of motor vehicles in the area; however our proposals may change how traffic moves around some roads, which may result in some associated and localised changes to air quality and noise levels. Environmental surveys and modelling will take place as part of our ongoing evaluation of proposals.

If after monitoring the effect of any changes to air quality, this has worsened, can you confirm that the changes can be reversed at a later date?

It is important we fully understand the impacts on air quality from the proposal. Changes cannot be fully reversed after implementation; however there may be opportunities to make amendments to address particular concerns.

5.2 Trees

Loss of trees goes against green environmental aims. Many were opposed to the removal of trees from Lambeth Bridge south. To replace lost trees, TfL should plant the maximum amount of new trees possible

The removal of some trees will be necessary to install the signalised crossroad junctions. We are proposing a net gain of approximately five trees across the scope of the scheme, the exact number being subject to underground investigations at detailed design stage.

We intend to provide greening, shade and shelter by optimising the use of the available land wherever possible. The new species at Lambeth Bridge south will be chosen to complement the existing tree species at the Garden Museum as far as possible, enhancing the sense of place and looking to sustain the local biodiversity.

5.3 Phoenix Palm tree – Lambeth Bridge north

Many respondents wanted the palm tree to stay where it is. They were concerned at the loss of a much-loved local feature, and the aesthetic look and feel of the junction.

Unfortunately it is not possible under the proposed design to retain the palm tree in this location. To address the loss of the palm tree we are investigating if it is possible to provide one palm tree on either side of the northern access to Lambeth Bridge, mirroring the obelisks and reinforcing the symmetrical composition of the bridge. However this is subject to underground investigations at detailed design stage.

Relocating the palm tree

We thank everyone that suggested a potential new home for the palm tree. It is proposed to relocate the tree to Churchill Gardens. Investigations are ongoing as to when and how this will be done.

6. Buses

Will bus route 507 continue on its current route once the scheme is implemented?

There are no plans to alter bus routes as part of these proposals.

There is concern about the removal of the eastbound bus lane on Lambeth Bridge as this will delay bus journeys. Why is it necessary to remove this?

To help create a safer environment for cycling and walking the eastbound bus lane on Lambeth Bridge is proposed to be removed and a footway level cycle lane provided on both sides of the bridge. Analysis using our traffic simulation model does not suggest significant delays with removal of this bus lane. However we will monitor bus performances post implementation. The likely journey time impacts for all modes can be seen in Appendix B.

Ban coaches from Great Peter Street and Horseferry Road to free up space for buses and prevent coaches using the small side roads to access Horseferry Road

We are not proposing any changes to coach access as part of these proposals.

7. Walking

Less pavement space on Lambeth Bridge feels unsafe. Is the reduced pavement width sufficient?

As noted on page 6 an EqIA has been undertaken on the scheme identifying the impacts on individual groups of people with protected characteristics.

The footway across Lambeth Bridge is proposed to have a minimum width of two and a half metres. Street furniture will be reduced and/or aligned to create as much footway space as possible. The proposed footway space is considered to be able to accommodate the volumes of pedestrians using them.

A Section 17 Crime and Disorder Assessment has been undertaken on the project to assess the impact the scheme may have on crime, disorder and community safety. This will continue to be updated as the scheme develops.

There is no pedestrian crossing facility at the south of Lambeth Bridge. Why has this not been offered?

Ideally a controlled crossing facility would be provided at the south of Lambeth Bridge. We have considered a straight across crossing; however this is not possible due in part to the location of the obelisks which would block the entrance and exit of the crossing. Additionally the impacts of installing this would increase queues considerably across the bridge and, at peak times through the northern junction. It would also have implications on the timings for other movements at the junction which again would result in queues and delay for other road users.

We have also considered a two stage (staggered) crossing; however there is not enough road width to provide a pedestrian island.

Instead we intend to make the pedestrian underpass a more obvious walking route. Pedestrian signage and the urban design leading into the subway will be reviewed in this locality during the next stage of design.

Consider reducing the traffic lanes from Albert Embankment into the junction to create shorter, more direct pedestrian crossings

The number and width of the traffic lanes has been determined based on the volume of traffic and the turning space required for vehicles using these lanes. We have aimed to achieve the right balance between keeping traffic moving and the needs of pedestrians.

Pedestrian disability access has not been included in the scheme

As seen on page 7, an Equality Impact Assessment (EqIA) has been carried out for the scheme looking at the impacts on individual groups of people with protected characteristics, including different disability groups. This will be kept under review and updated throughout the development of the scheme.

Pedestrian islands are being lost along Lambeth Palace Road. This does not consider the needs of vulnerable road users. Why is this necessary?

The traffic islands on Lambeth Palace Road are not of sufficient width to allow someone for example with a pushchair to be safely accommodated within the island extents. A wider pedestrian island has been provided outside the newly proposed entrance to The Palace Library on Lambeth Palace Road. This forms part of the Lambeth Palace library development with whom we are coordinating proposals.

8. Taxis

Taxis are not being considered when designing road schemes despite their excellent safety record and their commitment that all new London taxis are now zero emission capable

The primary objective of this scheme is to create a road environment at Lambeth Bridge that is safe and conducive for vulnerable road users of all abilities to negotiate. This has been achieved through facilities such as the introduction of signalised pedestrian crossings, new cycle lanes and separate cycle signals. All modes are considered throughout the design process of meeting the above objective.

Plans to lessen taxi access should be evidence based. Taxis should not be excluded just on the principle that fewer vehicles automatically equates to greater road safety

In response to feedback from the consultation we have introduced both the left and right turns onto Lambeth Bridge at Lambeth Bridge northern junction into the design for all traffic at all times of day (please see page 5). However like all traffic, taxis will need to adhere to other proposed banned movements which enable facilities for vulnerable road users to be provided.

Taxis are a fully accessible form of public transport and should be allowed the same traffic movements as buses; in particular they should be permitted access to the southbound bus lane towards Lambeth Bridge

As a result of feedback to the consultation we are now enabling all vehicles to turn left from Millbank north onto Lambeth Bridge.

9. Larger vehicles, commercial drivers and deliveries

Concern larger vehicles are not being considered in TfL's wider road strategy. It must not become totally unpractical to cover deliveries in the Capital and the movement of freight must not be compromised by changes that promote walking and cycling

It is necessary to introduce some banned movements into the design to enable time and space for cycling and pedestrian facilities to be accommodated. A balance must be met whereby safety improvements are provided and junctions can continue to operate.

Proposals should not reduce road space to the detriment of heavy and other goods vehicles (HGV) that need to travel on the road network

In designing these proposals we have considered HGVs and vehicles with abnormal loads by reviewing the key routes they use. The turning requirements of these vehicles have been considered and maintained. Where the proposals have reduced road lane widths, this is designed to remove any indecision between cyclists and HGVs. Specifically, lane widths between 3.2m and 3.9m have been avoided as they create uncertainty about whether enough space is available to overtake but generally do not allow enough space for overtaking.

Concern that the proposals had not taken account of tail swing and vehicles with trailers when designing traffic lanes

We have tested vehicular movements using a 16.5 metre maximum legal vehicle as an example of a vehicle with a very poor turning circle. We tested for all allowable movements. The results of these tests concluded that, provided the vehicle was taking the corner at an appropriate speed, these movements are accommodated within the design.

10. Albert Embankment underpasses

It was not clear what issues there were with the underpasses and we would like clarity over what is planned for them

We sought views about the underpasses to get local insight of any issues that we were not previously aware of. Wayfinding particularly at Lambeth Bridge south where there is no surface level crossing across Lambeth Bridge proposed will be investigated during the next stage of this scheme.

The underpasses are popular locally and many want to see these retained with an agreed maintenance plan

These underpasses are not proposed to be removed or closed as part of this scheme. They have been recorded as being in good condition.

The underpasses are not accessible to wheelchair users, buggies and mobility scooters. Replace the stairs with ramps

Changes to the structure of the underpasses are not within the scope of this scheme.

Can the underpasses be dual use for pedestrians and cyclists?

We do not propose to make the underpasses dual use for pedestrians and cyclists as part of this scheme and feedback has not indicated a high demand for this. By making the Lambeth Bridge south junction safer we expect that this will be a preferred option for cycling and demand for cycle access in the underpass would be reduced.

11. 20mph zones and traffic enforcement

Many observed that traffic is often at a standstill in the area and traffic speeds rarely get higher than 20mph. What justification is there to reduce the speed limit?

The proposal for a 20mph speed limit is to reduce speed related collisions on the roads we manage. We want to encourage speeds appropriate to the streets as

part of the Vision Zero Action Plan <https://tfl.gov.uk/corporate/safety-and-security/road-safety/vision-zero-for-london>

Many respondents supported a 20mph speed limit for safety reasons. This limit should be considered throughout the central London area

20mph limits are being considered in other areas in central as well as outer London as part of the Vision Zero Action Plan <https://tfl.gov.uk/corporate/safety-and-security/road-safety/vision-zero-for-london>

The junctions can only operate safely when all road users follow the rules. The roads in the area require more enforcement. Can enforcement and speed cameras be installed?

The introduction of CCTV cameras for enforcement purposes is currently being investigated.

There are strict criteria for installation of speed cameras which at the present time this site does not meet. We continually review this data and if required it can be considered at that time.

12. Heritage setting and changes to the urban realm

Concern that these proposals are a detriment to the historic settings of Lambeth Palace, Parliament and their local conservation areas, and any changes need to be 'in-keeping' with what is there now

The scheme doesn't propose any street furniture that would impede the views towards the World Heritage Sites. All materials chosen will be in keeping with the conservation area.

The views towards the historic Palace of Westminster will continue to be enjoyed from the footway on Lambeth Bridge and from the wider paved areas at Lambeth Bridge south.

Discussions with heritage officers from WCC and Lambeth boroughs have indicated that the proposals are unlikely to have negative impacts on heritage assets. However these discussions will continue as the scheme progresses.

The historic setting south of the river must be maintained and the highest quality materials must be used to protect this

We have proposed the use of Yorkstone paving at Lambeth Bridge southern junction in keeping with the Lambeth Palace conservation area. We will continue to work with LB Lambeth as well as the Church Commissioners and Lambeth Palace regarding our proposals for the area outside Lambeth Palace.

The historic lamp post to the north west of the Lambeth Bridge south junction incorporates a parish boundary marker. Please ensure the lamp post will be suitably protected and preserved

It is our aim to protect the locally listed vestry lamp column on the north-west footway at Lambeth Bridge south.

Changes to the bus stop positions and shelters near to Lambeth Palace will have a negative visual impact to the conservation area

The proposed location for the southbound bus stop SA on Lambeth Palace Road will be moved back to its existing location to ensure an unobscured view from Morton's Tower (Lambeth Palace) to the Palace of Westminster. See Appendix A for proposed layouts following the consultation.

13. Road safety

Have any road safety audits been carried out (such as a Stage-1 Road Safety Audit), and if so what conclusions were made?

A road safety audit stage 1 has been carried out and all items raised were responded to. The scheme will be subject to further safety audits as it develops.

The Lambeth Bridge northern roundabout was not considered dangerous. Collision data to substantiate the need to change the junctions should be provided. What proportion of collisions that have happened there have involved a cyclist?

Collision data can be viewed via our website here:

<https://tfl.gov.uk/corporate/safety-and-security/road-safety/london-collision-map?intcmp=33888>

This web page defaults to 'Fatal' and 'Serious' collisions. Once you set the location of interest, select 'Slight' to view all severities. The map displays one year's data at a time. Years can be selected by using the bar at the bottom of the map. The current data range is from 2005-2018.

In the 36 months to December 2018 there were two serious and 26 slight collisions that resulted in personal injury at the northern junction. Of these the proportion involving a vulnerable road user (pedestrian or pedal cyclist) was 88 per cent. For comparison, the Westminster borough average is 48 percent over this same time period (Data taken from Table 6: Casualties in Greater London 2016/2017/2018 by borough published in Casualties in Greater London during 2016/2017/2018. Note this includes both WCC roads as well as TLRN).

If monitoring shows that the roads are less safe once the scheme is completed, can you confirm that the changes can be reversed at a later date?

The number of personal injury collisions will be monitored post-scheme implementation. If there are patterns of collisions occurring, these will be investigated as is the case with other parts of the road network.

14. Security

Many commented that the proposals did not take account of the counter-terrorism measures introduced to Lambeth Bridge during summer 2017

There was support for the security barriers to remain provided these would improve facilities for cycling and walking and not make them worse

Temporary barriers were installed at Lambeth Bridge following a terror attack at London Bridge on 3 June 2017. We are currently working with appropriate agencies to understand what permanent measures are required and where they are best placed. In doing this we can ensure design requirements for all road users are maintained and that measures are suitable for their historic setting. We will look to coordinate any measures at the same time as the junction changes to minimise any impact this may cause.

How will proposals take into account any future counter-terrorism, security or special event measures required in the wider Parliament Square and Westminster Abbey area?

We continue to review proposals against changes to security measures in the area. Any highway restrictions owing to security measures will be incorporated into the final layout.

15. Other comments

Has thought been given to the conversion for commercial development of the unused bathroom block to the south east of the Lambeth Bridge northern junction?

Development of this site is not within the scope of the scheme. However, we have shared this suggestion with TfL's commercial development colleagues.

16. Consultation

16.1 Consultation materials

The consultation did not adequately highlight the negative elements of the proposals in relation to their negative impact on journey times, and therefore failed to deliver a fair and balanced proposal

A complaint was received concerning the consultation narrative used on our web page for the proposals. It was considered that the document, as shown on our website, failed to draw attention to or to state key overall negative effects of the scheme – in particular in relation to the impact of the proposals on journey times. Further that the narrative contained statements which it was considered, tended to suggest that the proposals would not cause negative effects.

We do not agree that the consultation document sought to suppress information on journey time impacts, or that it had been drafted with the intention of misleading consultees. We considered that the narrative on traffic impacts and the data table was an appropriate way of presenting complex traffic modelling data. In our experience, presenting information in this way strikes the right balance between informing consultees but not overburdening them with technical detail to the extent that they may be deterred from engaging with us. Those who required further detail were able to request it, should they have wished to do so.

The computer generated images (CGIs) of Lambeth Bridge north were misleading as they did not show the correct current 'interim' layout at the junction

The CGIs used for Lambeth Bridge north and south were artist's impressions designed to help respondents visualise how the junction might look in the future. Our 'before' image did not contain the current interim layout of the northern junction as this was a relatively new arrangement, and an image was not available. We opted to use an existing image that most of the public were familiar with.

The consultation materials did not show the counter-terrorism measures introduced to Lambeth Bridge during summer 2017

The security barriers on Lambeth Bridge were installed by the Police in light of the terror attack at London Bridge on 3 June 2017. By this date we had already prepared our CGIs, maps and plans for public consultation.

16.2 Data to support the proposals

Road safety data was not provided within the consultation

Some respondents commenting on our proposals for Lambeth Bridge northern junction said they had not been provided with enough data to support the scheme.

We were asked to provide:

- Present traffic flows (showing separately cyclists, cars, commercial vehicles, buses and coaches)
- levels of pollution on the main roads and the side roads that would become affected by the proposals, and the expected effect on them from the proposals
- the number of people who live, work and go to school in the area that are likely to be adversely affected by the proposals against those who would benefit from the changes and
- data to support our claim that the changes will result in more people walking and cycling in the area

As a project such as this develops, it is subject to a range of assessments, including an environmental review. As the project develops we will evaluate the impact of the proposals in more detail.

Please also refer to our sections about:

- 'The new road layout' (page 9), paragraph 2.2 'Impact on local residents
- 'Traffic impacts' (page 19)
- 'Environment' (Page 21), paragraph 5.1 'Air quality'

16.3 Consultation process

The consultation was held during the summer holidays to prevent the public from responding to it

Public consultation provides us with an opportunity to engage with the public and we undertake this process to ensure the views of the public and those who may be affected by our proposals are considered as part of our decision-making. When setting the consultation period, we took into consideration that the opportunity to comment would, in part, run over the school summer holidays. To mitigate this we offered an extended consultation period of eight weeks, instead of the usual six weeks.

We were pleased that this consultation attracted a large number of responses from the public and our stakeholders, raising a range of issues which we have been able to carefully consider.

The consultation was not well publicised and some local residents were not aware of the proposals

We sought to inform local residents, employers and employees, bus passengers and other stakeholders about this consultation in the following ways:

- Residential letter drop via a professional distribution company
- By email to stakeholders, including delivery companies and taxi and private hire contacts
- By email to customers that use our services via Oyster, contactless payment cards and Congestion Charging that have registered an interest in driving, cycling or walking; and that live in the following postal codes: SE1, SE11, SE17, SE5, SW9, SW8, SW1, SW3, SW7 and SE15
- Marketing activity such as web based advertisements via internet search engines
- Local press advertisements including a weekly feature in the Metro newspaper throughout the consultation period
- Public events

Multiple occupancy apartment blocks within the Westminster area did not receive letters to inform them of the proposals

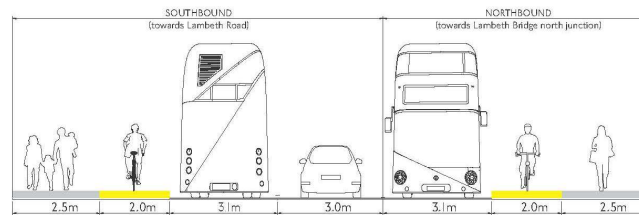
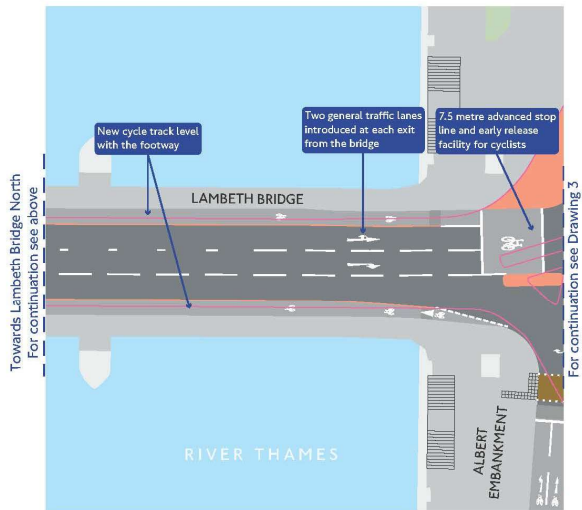
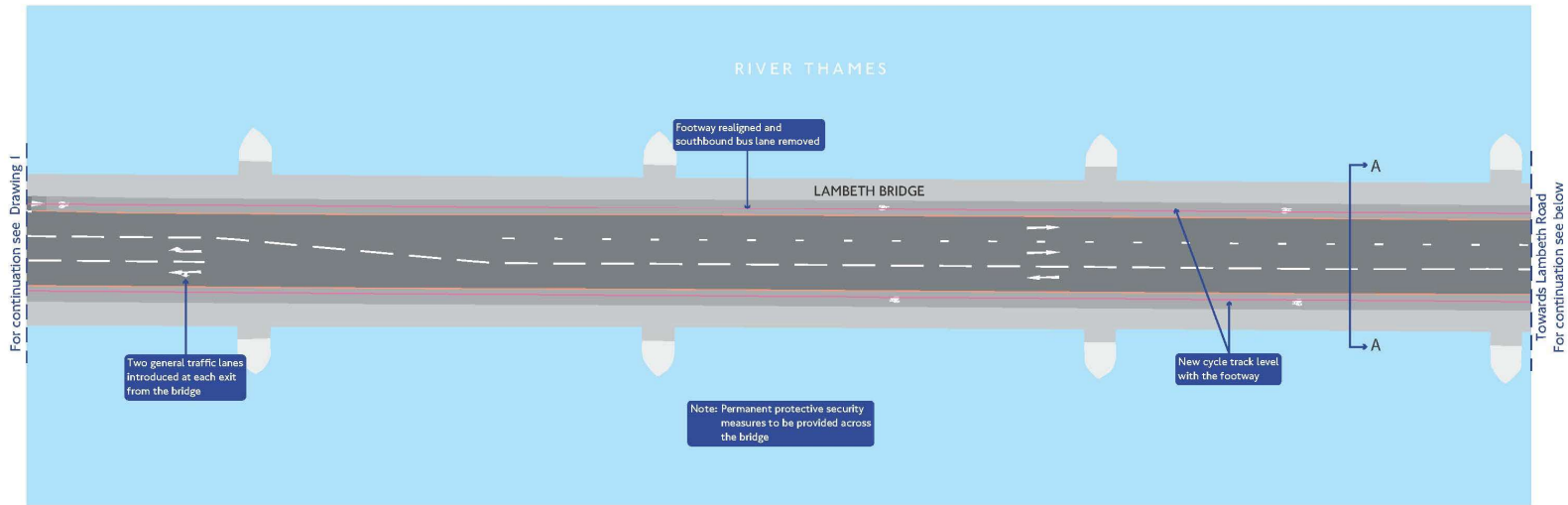
During the consultation period it was brought to our attention by one multiple occupancy apartment block within the Westminster area that it had not received our letter to residents regarding the proposals. This matter was related to an address with private mailboxes that were not available via standard Royal Mail data as a security measure that enabled the building to retain its exclusivity. We therefore hand delivered further literature, so that the building concierge could make this available to residents.

The consultation was reopened at the end of the summer and the public was not informed

The consultation for Lambeth Bridge north and south was not reopened and our online survey closed on 20 August as planned. Some residents, via WCC, asked if they could submit email responses beyond the deadline. As it is common practice to consider requests for late responses where they can be accommodated without affecting our timescales, we said we would be able to consider these up until 20 September. We subsequently received a mixture of late responses, both in support of and against our proposals.

Appendix A: Revised plans following consultation:

Lambeth Bridge Drawing 2

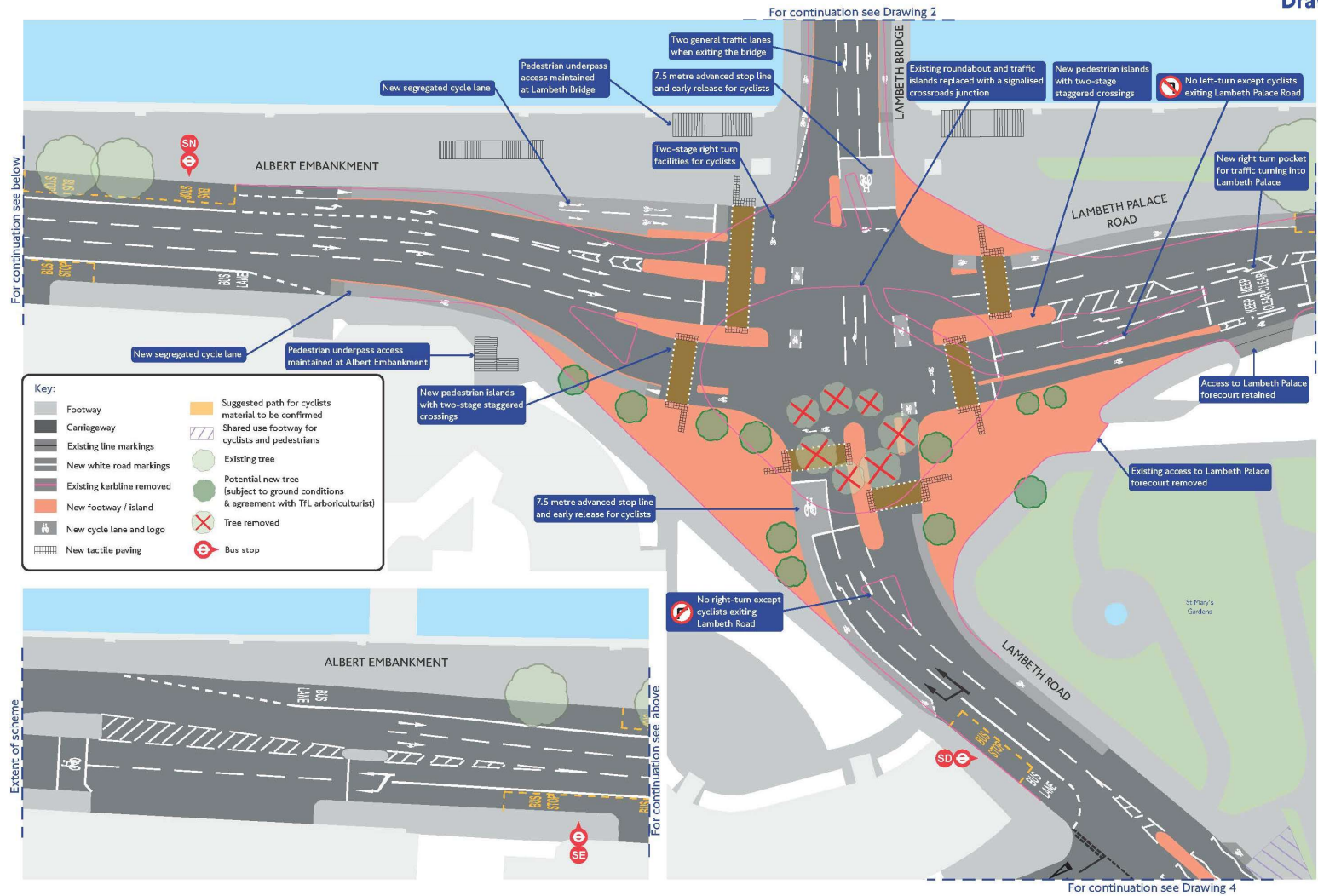


Section A - A
Proposed lane measurements

Key:			
	Footway		Suggested route for cyclists material to be confirmed
	Carrageway		Shared use footway for cyclists and pedestrians
	Existing line markings		New footway / island
	Existing kerbline removed		New cycle lane and logo
	New tactile paving		New white road markings

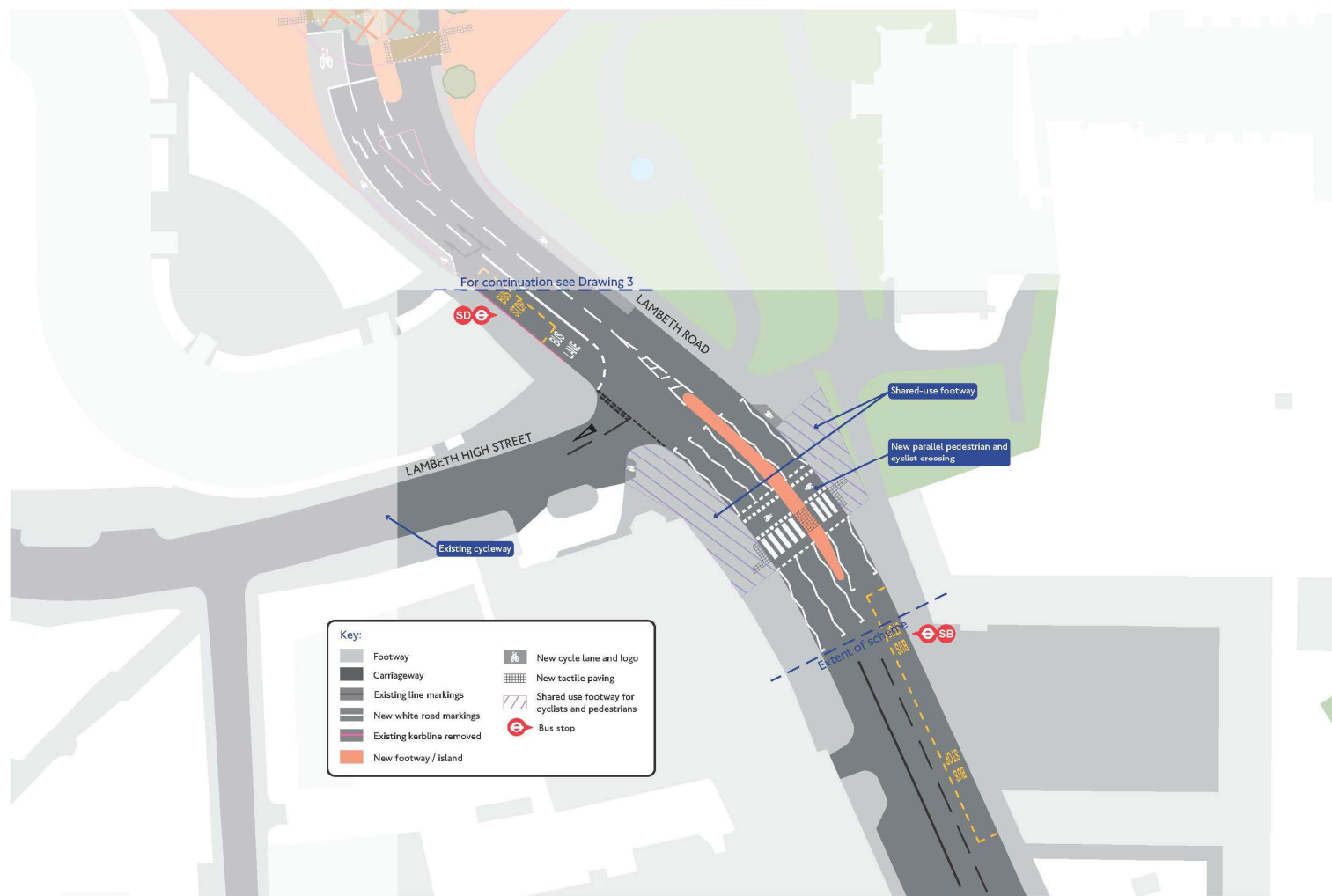


Lambeth Bridge South Drawing 3

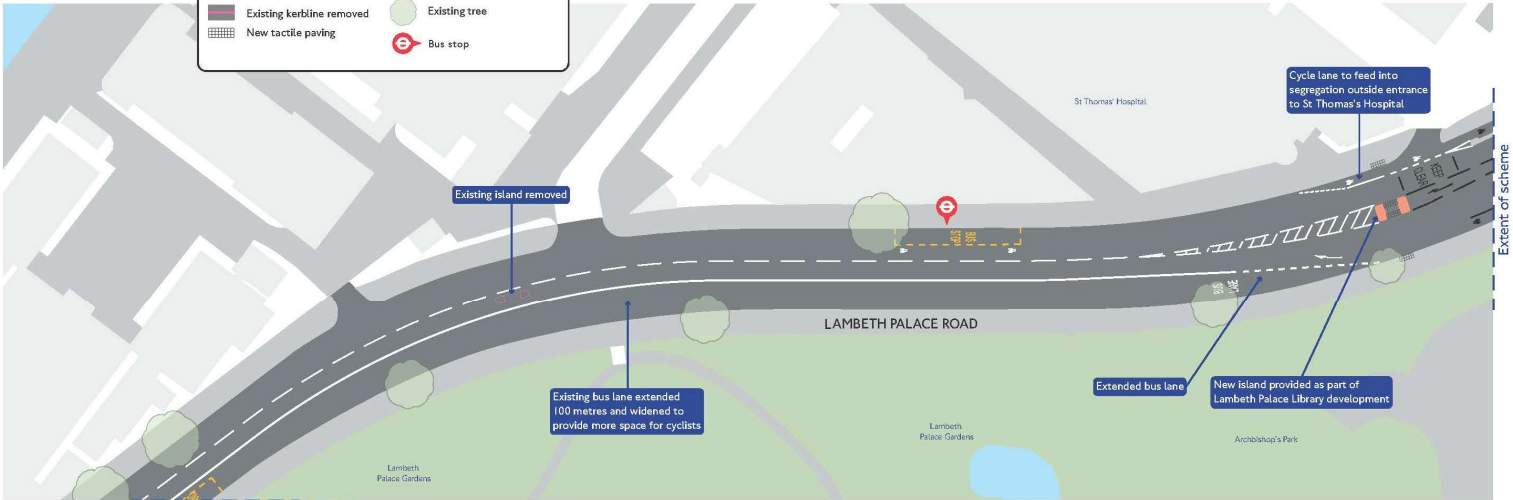
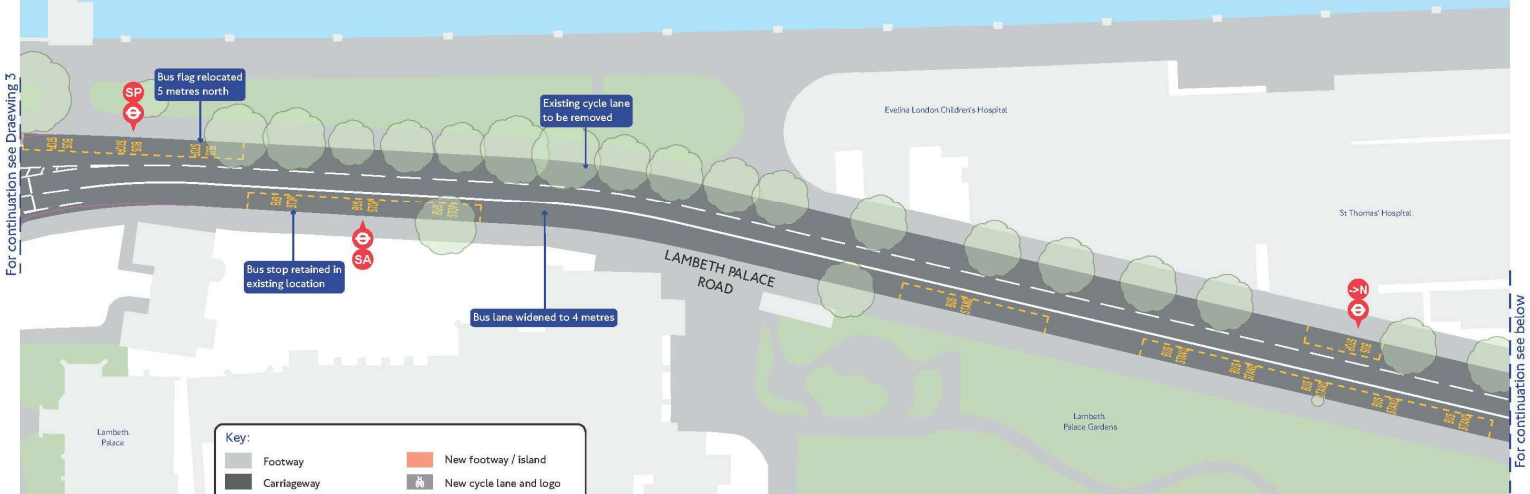




Lambeth Palace Road Drawing 4



Lambeth Palace Road Drawing 5



Appendix B: Likely journey time impacts following changes to the design post consultation

Summary of changes from 2017 consultation

Following consultation feedback in 2017 several turning movements have now been retained eastbound onto Lambeth Bridge and the location of the southbound bus stop on Lambeth Palace Road has been moved back to its existing location. The following turning movements are now allowed at all times of day for all vehicles: Millbank North to Lambeth Bridge and Millbank South to Lambeth Bridge. The shared pedestrian and cycle areas have been reviewed and removed where it is safe for cyclists to use the carriageway. Shared use remains between Millbank South and Horseferry Road. There is also a carriageway level cycle lane through the footway between Millbank North and Lambeth Bridge. These alterations to the design in response to consultation feedback have resulted in some changes to the modelled journey times.

Please note journey times are not directly comparable to the 2017 consultation. This is due to the modelled area being extended to ensure all journey times changes are captured by the modelling assessment. The tables below compare future modelled journey times with and without the Lambeth Bridge scheme. Both models include demand changes associated with committed developments and population growth, and planned changes to the road network. This allows us to isolate other changes on the network and present the predicted impact of the Lambeth Bridge scheme.

Revised Journey Times: Buses

Mode	Routes	Future Journey Time without Scheme		Future Journey Time with Scheme		Journey Time Impact of Scheme		
		AM	PM	AM	PM	AM	PM	
Buses Average journey times (Minutes)	Millbank North to Lambeth Road	Route 3 Eastbound	5 to 6	6 to 8	6 to 8	6 to 8	1 to 2	0 to 1
	Lambeth Road to Millbank North	Route 3 Westbound	6 to 8	5 to 6	4 to 5	6 to 8	0 to -1	0 to 1
	Marsham Street to Lambeth Palace Road	Route C10 Northbound	10 to 15	8 to 10	8 to 10	8 to 10	-3 to -4	No change
	Lambeth Palace Road to Marsham Street	Route C10 Southbound	6 to 8	6 to 8	10 to 15	6 to 8	3 to 4	No change
	Albert Embankment to Lambeth Palace Road	Route 77 Northbound	8 to 10	6 to 8	10 to 15	10 to 15	2 to 3	2 to 3
	Lambeth Palace Road to Albert Embankment	Route 77 Southbound	4 to 5	5 to 6	5 to 6	5 to 6	1 to 2	No change
	Millbank South to Millbank North	Route87 Northbound	8 to 10	8 to 10	10 to 15	4 to 5	3 to 4	-4 to 5
	Millbank North to Millbank South	Route87 Southbound	4 to 5	5 to 6	5 to 6	6 to 8	1 to 2	1 to 2
	Albert Embankment to Lambeth Road	Route 344 Northbound	10 to 15	6 to 8	10 to 15	10 to 15	1 to 2	2 to 3
	Lambeth Road to Albert Embankment	Route 344 Southbound	3 to 4	3 to 4	3 to 4	3 to 4	0 to 1	0 to -1
	Horseferry Road to Lambeth Palace Road	Route 507 Northbound	15 to 20	15 to 20	10 to 15	10 to 15	-8 to -10	-3 to 4
	Lambeth Palace Road to Horseferry Road	Route 507 Southbound	6 to 8	6 to 8	10 to 15	6 to 8	3 to 4	0 to -1

Bus journey times through the scheme area have been updated since consultation. In the morning the scheme increases journey times by up to four minutes for both the C10 southbound and 507 southbound from Lambeth Palace Road. There is also an increase of up to four minutes for route 87 northbound. In the morning there are some improved bus journey times for routes 507 northbound and C10 northbound. These routes on Horseferry Road see an improvement due to the new signalled junction on the northern side of the river improving flow of vehicles from Horseferry Road onto Lambeth Bridge.

In the evening there are some increases in journey times of up to three minutes for route 77 northbound and 344 northbound from Albert Embankment. However, bus journey time improvements are seen on route 87 northbound and route 507 northbound. This is due to the new signalled junction reducing the delay the current priority roundabout is predicted to incur and assisting buses through the junction.

Revised Journey Times: Cyclists

			Future Journey Time without Scheme		Future Journey Time with Scheme		Journey Time Impact of Scheme		
Mode	Routes		AM	PM	AM	PM	AM	PM	
Cyclists entering from Lambeth North		Millbank North to Millbank South	Southbound	3 to 4	3 to 4	3 to 4	4 to 5	No change	1 to 2
		Millbank North to Lambeth Palace Road	Southbound	4 to 5	3 to 4	3 to 4	4 to 5	0 to -1	1 to 2
		Millbank North to Lambeth Road	Eastbound	4 to 5	4 to 5	4 to 5	4 to 5	No change	No change
		Millbank North to Albert Embankment	Southbound	3 to 4	5 to 6	5 to 6	6 to 8	1 to 2	0 to 1
		Millbank South to Millbank North	Northbound	3 to 4	3 to 4	4 to 5	3 to 4	0 to 1	0 to 1
		Millbank South to Horseferry Road	Westbound	2 to 3	1 to 2	4 to 5	1 to 2	1 to 2	No change
		Millbank South to Lambeth Palace Road	Northbound	4 to 5	2 to 3	5 to 6	2 to 3	0 to 1	0 to 1
		Millbank South to Lambeth Road	Eastbound	4 to 5	4 to 5	5 to 6	4 to 5	1 to 2	0 to 1
		Millbank South to Albert Embankment	Southbound	4 to 5	5 to 6	6 to 8	6 to 8	2 to 3	1 to 2
		Horseferry Road to Millbank North	Northbound	2 to 3	2 to 3	3 to 4	4 to 5	0 to 1	2 to 3
		Horseferry Road to Lambeth Palace Road	Eastbound	4 to 5	3 to 4	4 to 5	5 to 6	0 to 1	1 to 2
		Horseferry Road to Lambeth Road	Eastbound	3 to 4	3 to 4	4 to 5	4 to 5	0 to 1	1 to 2
		Horseferry Road to Albert Embankment	Southbound	4 to 5	4 to 5	5 to 6	6 to 8	1 to 2	1 to 2
	Average journey times (Minutes)								
Cyclists entering from Lambeth South		Lambeth Palace Road to Lambeth Road	Southbound	0 to 1	2 to 3	0 to 1	2 to 3	No change	0 to 1
		Lambeth Palace Road to Albert Embankment	Southbound	3 to 4	3 to 4	4 to 5	4 to 5	1 to 2	1 to 2
		Lambeth Palace Road to Millbank North	Northbound	4 to 5	3 to 4	6 to 8	4 to 5	1 to 2	3 to 4
		Lambeth Palace Road to Millbank South	Southbound	1 to 2	4 to 5	2 to 3	6 to 8	0 to 1	1 to 2
		Lambeth Palace Road to Horseferry Road	Westbound	3 to 4	3 to 4	6 to 8	6 to 8	3 to 4	2 to 3
		Lambeth Road to Lambeth Palace Road	Westbound	2 to 3	No data	4 to 5	No data	1 to 2	No data
		Lambeth Road to Millbank North	Northbound	4 to 5	3 to 4	4 to 5	4 to 5	0 to 1	1 to 2
		Lambeth Road to Albert Embankment	Westbound	1 to 2	3 to 4	1 to 2	No data	No change	No data
		Lambeth Road to Millbank South	Southbound	3 to 4	3 to 4	4 to 5	4 to 5	0 to 1	1 to 2
		Lambeth Road to Horseferry Road	Westbound	3 to 4	3 to 4	5 to 6	4 to 5	1 to 2	1 to 2
		Albert Embankment to Lambeth Palace Road	Northbound	3 to 4	3 to 4	5 to 6	4 to 5	1 to 2	1 to 2
		Albert Embankment to Lambeth Road	Eastbound	3 to 4	3 to 4	6 to 8	4 to 5	2 to 3	1 to 2
		Albert Embankment to Millbank North	Northbound	5 to 6	2 to 3	8 to 10	4 to 5	2 to 3	1 to 2
		Albert Embankment to Millbank South	Southbound	4 to 5	4 to 5	6 to 8	6 to 8	2 to 3	3 to 4
Average journey times (Minutes)		Albert Embankment to Horseferry Road	Westbound	4 to 5	3 to 4	8 to 10	5 to 6	4 to 5	2 to 3

These proposals deliver safety benefits for cyclists through the Lambeth Bridge area, for some routes ensuring cyclist safety has resulted in increases in journey time. The updated design and alterations to signal timings have changed some cycle journey times. The removal of all shared use areas at the southern junction and from two corners of the northern junction causes some additional delay to left turning cyclists. For example, cyclist journey times from Horseferry Road to Millbank North increase in the revised proposal due to cyclists now waiting for additional time at traffic signals as they are no longer able to bypass the junction. There are increases of up to five minutes for cyclists traveling from Albert Embankment to Horseferry Road and smaller increases for other routes passing northbound over Lambeth Bridge. This is due to cyclists now waiting at the new signalled junctions on the northern and southern sides of the river.

Revised Journey Times: Pedestrians

Mode	Routes		Future Journey Time without Scheme		Future Journey Time with Scheme		Journey Time Impact of Scheme	
			AM	PM	AM	PM	AM	PM
Pedestrians crossing at Lambeth South Average journey times (Minutes)	Across Lambeth Palace Road	Eastbound	1 to 2	1 to 2	1 to 2	1 to 2	No change	No change
	Across Lambeth Palace Road	Westbound	1 to 2	1 to 2	1 to 2	1 to 2	0 to 1	0 to 1
	Across Lambeth Road	Southbound	1 to 2	1 to 2	2 to 3	2 to 3	0 to 1	0 to 1
	Across Lambeth Road	Northbound	1 to 2	1 to 2	2 to 3	1 to 2	0 to 1	No change
	Across Albert Embankment	Westbound	1 to 2	1 to 2	1 to 2	1 to 2	No change	No change
	Across Albert Embankment	Eastbound	1 to 2	1 to 2	2 to 3	2 to 3	1 to 2	0 to 1
Pedestrians crossing at Lambeth North Average journey times (Minutes)	Across Millbank North	Eastbound	0 to 1	0 to 1	1 to 2	1 to 2	0 to 1	1 to 2
	Across Millbank North	Westbound	0 to 1	0 to 1	1 to 2	1 to 2	0 to 1	0 to 1
	Across Horseferry Road	Northbound	0 to 1	0 to 1	0 to 1	1 to 2	0 to 1	0 to 1
	Across Horseferry Road	Southbound	0 to 1	0 to 1	0 to 1	1 to 2	0 to 1	0 to 1
	Across Millbank South	Westbound	0 to 1	0 to 1	1 to 2	1 to 2	0 to 1	1 to 2
	Across Millbank South	Eastbound	0 to 1	0 to 1	1 to 2	1 to 2	0 to 1	0 to 1
	Across Lambeth Bridge	Northbound	0 to 1	0 to 1	1 to 2	1 to 2	0 to 1	1 to 2
	Across Lambeth Bridge	Southbound	0 to 1	0 to 1	1 to 2	1 to 2	0 to 1	1 to 2

The new signalled junctions remove the zebra crossings on the northern roundabout and change the operation of the signalled crossings on the southern roundabout. The revised northern junction design now includes staggered crossings on both Millbank arms of the junction. The design changes and associated signal timing modifications have had a small impact on pedestrian journey times. No pedestrian journey times have changed by more than two minutes compared to the future model.

Revised Journey Times: General Traffic

Mode	Routes		Future Journey Time without Scheme		Future Journey Time with Scheme		Journey Time Impact of Scheme	
			AM	PM	AM	PM	AM	PM
Traffic entering from Lambeth North Average journey times (Minutes)	Millbank North to Millbank South	Southbound	3 to 4	6 to 8	3 to 4	4 to 5	0 to 1	-2 to -3
	Millbank North to Horseferry Road	Westbound	3 to 4	4 to 5	2 to 3	2 to 3	0 to -1	-2 to -3
	Millbank North to Lambeth Palace Road	Northbound	5 to 6	8 to 10	3 to 4	2 to 3	0 to -1	-5 to -6
	Millbank North to Lambeth Road	Eastbound	6 to 8	8 to 10	5 to 6	6 to 8	No change	-2 to -3
	Millbank North to Albert Embankment	Southbound	6 to 8	10 to 15	6 to 8	5 to 6	No change	-5 to -6
	Millbank South to Millbank North	Northbound	8 to 10	6 to 8	10 to 15	3 to 4	1 to 2	-3 to 4
	Millbank South to Lambeth Palace Road	Northbound	8 to 10	8 to 10	10 to 15	6 to 8	4 to 5	-2 to 3
	Millbank South to Lambeth Road	Eastbound	8 to 10	10 to 15	10 to 15	6 to 8	3 to 4	-2 to 3
	Horseferry Road to Millbank North	Northbound	15 to 20	10 to 15	4 to 5	8 to 10	-10 to -15	-4 to 5
	Horseferry Road to Lambeth Palace Road	Northbound	15 to 20	15 to 20	8 to 10	10 to 15	-8 to -10	-4 to 5
	Horseferry Road to Lambeth Road	Eastbound	15 to 20	15 to 20	8 to 10	10 to 15	-8 to -10	-4 to 5
	Horseferry Road to Albert Embankment	Southbound	15 to 20	15 to 20	3 to 4	10 to 15	-15 to -20	-8 to -10
Traffic entering from Lambeth South Average journey times (Minutes)	Lambeth Palace Road to Albert Embankment	Southbound	2 to 3	5 to 6	8 to 10	8 to 10	5 to 6	3 to 4
	Lambeth Palace Road to Millbank North	Northbound	3 to 4	6 to 8	4 to 5	2 to 3	0 to 1	-4 to -5
	Lambeth Palace Road to Millbank South	Southbound	4 to 5	6 to 8	8 to 10	8 to 10	4 to 5	2 to 3
	Lambeth Palace Road to Horseferry Road	Westbound	4 to 5	6 to 8	8 to 10	6 to 8	5 to 6	0 to 1
	Lambeth Road to Millbank North	Northbound	3 to 4	4 to 5	3 to 4	8 to 10	No change	3 to 4
	Lambeth Road to Albert Embankment	Southbound	8 to 10	6 to 8	4 to 5	8 to 10	-3 to -4	2 to 3
	Lambeth Road to Millbank South	Southbound	4 to 5	6 to 8	4 to 5	8 to 10	No change	3 to 4
	Lambeth Road to Horseferry Road	Westbound	4 to 5	6 to 8	6 to 8	8 to 10	1 to 2	2 to 3
	Albert Embankment to Lambeth Palace Road	Northbound	10 to 15	4 to 5	10 to 15	8 to 10	2 to 3	3 to 4
	Albert Embankment to Lambeth Road	Eastbound	10 to 15	4 to 5	10 to 15	8 to 10	2 to 3	4 to 5
	Albert Embankment to Millbank North	Northbound	10 to 15	6 to 8	6 to 8	6 to 8	-6 to -8	0 to -1
	Albert Embankment to Millbank South	Southbound	10 to 15	6 to 8	6 to 8	6 to 8	-2 to -3	0 to 1
Albert Embankment to Horseferry Road	Westbound	10 to 15	6 to 8	10 to 15	5 to 6	0 to -1	0 to -1	

General traffic journey times have changed following the design changes to retain more turning movements following feedback from consultation in 2017. The improved connectivity has led to more vehicles travelling eastbound over Lambeth Bridge. In the morning peak the largest journey time increases are from Millbank South and Lambeth Palace Road of up to six minutes. However, there are improvements to all journeys from Horseferry Road. These large improvements are due to the predicted worsening performance of the existing roundabout in the future as a result of increased traffic and cycle flows. The new signalled junction improves progression of vehicles from Horseferry Road. In the evening, traffic on the northern side of the river benefits from the new signalled junction. However, there are some journey time increases south of the river, for example Albert Embankment to Lambeth Road increases by up to five minutes and journey times from Lambeth Road increase by up to four minutes in the evening peak

Revised Traffic Reassignment

The proposed changes at Lambeth Bridge will affect the way vehicles use the road network in the local area. The scale and complexity of traffic reassignment modelling means we are not able to model every road, instead general patterns of flow change and reassignment are identified.

In the morning and evening peak, reductions in traffic flow are expected in both directions on Horseferry Road. There will also be reductions in vehicle flows approaching the proposed junction at Lambeth Bridge North from Millbank North and Millbank South. These flow reductions will also be experienced eastbound on Lambeth Bridge, and onto Lambeth Palace Road northbound. Some routes will experience a small increase in flow such as Great Peter Street in both the morning and evening peaks, Marsham Street northbound in the morning and Regency Street southbound in the evening.

At the southern junction in the morning there is a reduction in flow on Albert Embankment towards Lambeth Bridge. In the evening peak the new junction arrangement is expected to reduce flow southbound on Lambeth Palace Road and increase flow on Lambeth Road. There will be a small increase in flow using Kennington Road northbound in the morning.

Each of these changes is a result of the proposals affecting traffic capacity and delay, due to the reallocation of road space, and proposed turning restrictions. These flow reductions are partly due to reassignment onto nearby bridges such as Vauxhall Bridge and Westminster Bridge, and can also be attributed to a predicted increase in queuing as a result of the scheme. This is reflected in the changes to journey times presented and discussed previously.

Technical Note on Modelling Results

No change indicates a predicted journey time change of less than fifteen seconds

No data indicates there is no comparison available due to a route through the modelled area having insufficient demand to calculate a robust journey time comparison

Turning Movements

Some turning movements are proposed to be banned for general traffic and buses as part of the Lambeth Bridge scheme and are not shown in the tables above. These movements are:

North

The left turn from Millbank South to Horseferry Road

The right turn from Horseferry Road to Millbank South

Note the right turn from Millbank North to Horseferry Road and left turn from Horseferry Road to Millbank North are included above, but in the proposed design requires rerouting via Great Peter Street and Marsham Street

South

The left turn from Lambeth Palace Road onto Lambeth Road

The right turn from Lambeth Road to Lambeth Palace Road

TfL has used traffic modelling techniques to calculate the expected average journey time changes at the busiest hour in both the morning and evening peak. The data tables outline the expected average journey times extracted from VISSIM modelling software for the following:

Future without scheme – Journey times expected on street if the Lambeth Bridge scheme is not built. These average journey times take account of all other planned changes to the network, along with predicted changes in demand on London's road network.

Future with scheme – Journey times expected on street if the Lambeth Bridge scheme is built. These average journey times take account of all other planned changes to the network, along with predicted changes in demand on London's road network.