Programmes and Investment Committee



Date: 5 October 2023

Title: Safe and Healthy Streets Programme – Lambeth Bridge

This paper will be considered in public

1 Summary

Safe and Healthy Streets Programme					
	Existing Financial Authority (to 2025/26)	Forecast (to 2027/28)	Existing Programme and Project Authority	Additional Authority Requested to end of 2027	Total Authority
Cost	£1,268.1m	£1,307.9m	£817.1m	£11.0m	£828.1m
Income	(£40.1m)	(£40.1m)	(£40.1m)	-	(£40.1m)
Net Cost	£1,288.0m	£1,267.9m	£777.0m	£11.0m	£788.0m

Authority Approval: The Committee is asked to approve additional Programme and Project Authority of £11m from the Safe and Healthy Streets Programme for the Lambeth Bridge project.

A further £2m has been contributed to the project from the Streets, Bus, Rail and Sponsored Services Renewals Programme to deliver the essential asset remedial works of waterproofing and bridge deck repairs at Lambeth Bridge. The Committee approved Programme and Project Authority for this £2m contribution as part of the previous Surface Assets Renewals Programme approval on 17 May 2023.

Outputs and Schedule: Lambeth Bridge is a safety and security scheme that will improve cycle connectivity and pedestrian crossings around Lambeth Bridge. It replaces the roundabouts at both ends of Lambeth Bridge with signalised crossroads, separating cyclists in time and/or space where possible. It also involves the provision of Hostile Vehicle Mitigation (HVM) and essential structural maintenance and renewal work to increase the longevity of Lambeth Bridge.

1.1 The additional Programme and Project Authority requested in this paper is required to let a contract for the construction of this high priority safety and security scheme. The Committee is also asked to note that pre-construction enabling works need to take place in 2023/24 while the scheme is in detailed design, prior to the next annual Safe and Healthy Streets submission to the Committee in December 2023. This approval will allow the enabling works to be

- undertaken this year, with the main construction works starting in spring 2024, meeting our public commitments to address safety at this location.
- 1.2 Pre-construction works include relocation of an distinctive palm tree from Lambeth Bridge northern roundabout to Churchill Gardens (this is Westminster City Council (WCC) residential land). The palm tree must be moved in planting season to increase the likelihood of successful replanting. If this element of the project is not started as planned, the project will be delayed by one year, resulting in an increase of delivery costs as well as a delay to realising the safety benefits at this location. Relocation of the tree also enables statutory utility works to be undertaken, including lowering Thames Water utility assets currently located within the roundabout footprint. These works enable the utility covers to be at carriageway level when the roundabout is removed.
- 1.3 A paper is included on Part 2 of the agenda which contains exempt supplementary information. The information is exempt by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the business affairs of TfL and contractors. Any discussion of that exempt information must take place after the press and public have been excluded from this meeting.

2 Recommendations

- 2.1 The Committee is asked to note the paper and the exempt supplementary information on Part 2 of the agenda and:
 - (a) approve additional Programme and Project Authority of £11m to enable the construction of the Lambeth Bridge project, giving a total Programme and Project Authority at the sum set out in the exempt supplementary information on Part 2 of the agenda; and
 - (b) note the matters for which Programme and Project Authority is sought above, including commitments that extend beyond the current Business Plan and budget, accepting that provision would need to be made for those commitments in future business plans and budgets.

3 Background of Lambeth Bridge North and South

3.1 Lambeth Bridge north and south scheme is within London Borough (LB) of Lambeth and WCC. Figure 1 shows the location and physical scope of the scheme.

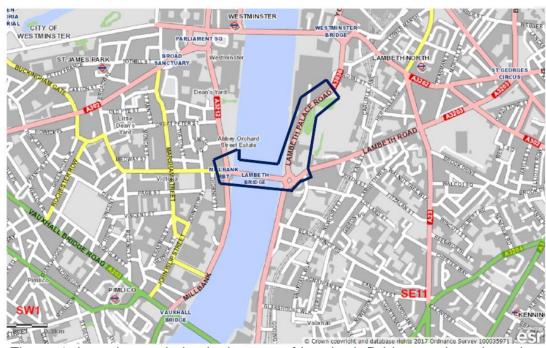


Figure 1: Location and physical scope of Lambeth Bridge north and south

3.2 Lambeth Bridge north and south is in the top 50-75 percentile for road danger London-wide. In terms of cyclist collisions (all severities), Lambeth Bridge northern junction is the most dangerous junction in London (using 36 months of data up to September 2021). It is one of the Mayor's 73 Safer Junctions as listed in the Mayor's Transport Strategy (MTS). Following a cycle fatality in 2015, the coroner at the inquest was satisfied TfL was developing transformational plans to address safety at the junction and therefore no prevention of future deaths certificate was issued. Interim changes were made to Lambeth Bridge northern junction in 2017 to slow traffic and tighten the junction radii. However, the junction does not include any cycle priority and remains difficult for cyclists to safety negotiate. Figure 2 shows the existing junction layout.



Figure 2: Existing layout of Lambeth Bridge northern junction, facing west towards Horseferry Road

3.3 Lambeth Bridge southern junction is the 52nd most dangerous junction in London. It is a large, intimidating junction that undoubtedly creates a negative perception of safety and a barrier to east/west and north/south cycling. Figure 3 shows the existing layout of Lambeth Bridge southern junction.



Figure 3: Existing layout of Lambeth Bridge southern junction, facing south towards Albert Embankment

3.4 In 2017, following security concerns, the police implemented temporary HVM measures along both footways of Lambeth Bridge (see Figure 4). A Threat and Vulnerability Risk Assessment (TVRA) carried out by the TfL Security Policing and Enforcement team, the Metropolitan Police Service and City of London Police has demonstrated the need to replace this with permanent HVM which fully protects both cyclists and pedestrians, as well as being sensitive to the heritage of the Grade II listed bridge. This ensures compliance with the National Protective Security Authority (NPSA) under the guidance documents of public realm design guide for HVM, HVM schemes for the streetscape, and National Counter Terrorism Security Office crowded places guidance.



Figure 4: Temporary HVM along Lambeth Bridge

- 3.5 Lambeth Bridge is identified in the MTS and TfL's Strategic Cycling Analysis (SCA) as one of the highest priority links in London's future strategic cycle network for 2041. By progressing this project, cyclists will be provided with a safe, fully connected route between Lambeth Bridge and Parliament Square. Lambeth Bridge and its junctions are a crucial gap in the network between Cycleway 8 (Chelsea Bridge to Lambeth Bridge), Cycleway 3 (Barking to Lancaster Gate) and Cycleway 5 (Vauxhall to Waterloo). It links Lambeth, Westminster and Vauxhall as well as linking to many central London cycling routes.
- 3.6 Delivery of this scheme is a very high priority for safety and security reasons, as demonstrated through the evidence provided above. The project will deliver highway safety improvements through removal of the roundabouts at either end of Lambeth Bridge and their replacement with signalised junctions which include high quality dedicated cycle facilities, including protected cycle lanes where feasible (see Figures 5 and 6). This will separate cyclists in time and/or space from vehicular traffic, improving safety and helping to unlock cycle connectivity in the area. The scheme includes resurfacing around the new junctions either end of Lambeth Bridge, as well as Lambeth Palace Road, where lane markings will be amended, and a bus lane extended by 100m.



Figure 5: Proposed crossroad layout at Lambeth Bridge northern junction, facing west, towards Horseferry Road

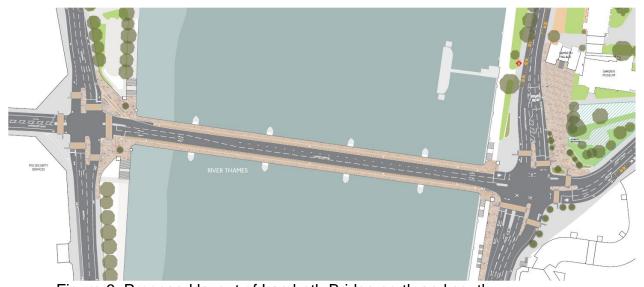


Figure 6: Proposed layout of Lambeth Bridge north and south

3.7 To achieve efficiencies and minimise disruption for the travelling public, remedial measures to improve waterproofing and deck repairs on Lambeth Bridge are being brought forward from a provisional start date of 2025. This work will provide 25 years of service life for the bridge concrete deck and waterproofing. The coordination of works avoids the need for further lengthy closures of Lambeth Bridge and increases the longevity of the structure. The waterproofing and deck repairs will provide immediate protection to the fabric of the bridge by slowing the rate of deterioration of the steelwork supporting structure. They will also delay the need for more costly asset strengthening and remedial works to the underside/supporting steelwork and bridge bearings. We are responsible for 1,670 bridges and structures; Lambeth Bridge has been assessed to be the 12th highest priority for investment of these assets based on its condition and usage.

- 3.8 Public consultation on changes to the northern and southern roundabouts took place between June to August 2017. We received 2,058 responses. Following consultation feedback, work took place with WCC to address concerns about displacement of traffic to borough streets. These concerns were partly addressed by removing two banned movements in the design to enable vehicles to remain on the Transport for London Road Network (TLRN) and avoid side streets. The scheme was also modified in response to the Independent Disability Advisory Group's advice on a conflict between users, mainly through removing shared cycle and pedestrian space where it is safe to do so. The modifications to address stakeholder comments resulted in a delay in releasing the responses to issues raised document and consultation report, which were published in March 2020. Public engagement events after publication of the consultation report were due to take place in spring 2020 but were postponed due to the pandemic. These engagement events were instead held in July 2023, where the public were invited to discuss any aspects of the design about which they had concerns. While it is acknowledged there has been a delay between the original consultation and proposed start of construction, we have undertaken significant public engagement during the project lifecycle to maintain awareness of the planned improvements amongst stakeholders and the travelling public.
- 3.9 Modelling of the Lambeth Bridge north and south scheme was previously undertaken using the London Highway Assignment Model (LoHAM), with traffic counts undertaken in May 2023 to confirm the modelled flows remain valid. The results of the recent counts demonstrate that traffic has actually reduced at Lambeth Bridge northern junction by 36 per cent in the morning peak hour and 28 per cent in the evening peak hour and at Lambeth Bridge southern junction by 27 per cent in the morning peak hour and 18 per cent in the evening peak hour (since the modelling was undertaken). The reduction in traffic confirms that the traffic modelling results represent a worst-case scenario. From the modelled results, we do not expect to see a substantial change to the way that traffic flows around the Lambeth area once the scheme is built or a significant level of traffic displacement. However, there are proposed changes to waiting and loading restrictions on Black Prince Road which will ease traffic movement in and out of this road, which is one of the main routes to a London Fire Brigade station.
- 3.10 Air quality and noise assessments were carried out in March 2020. The scheme has a generally positive impact on air quality in the study area and there are potentially beneficial impacts at some selected receptors for NO2. It is considered that overall, the scheme is not significant in terms of air quality impacts. Traffic noise modelling reveals that most areas will experience imperceptible changes in noise exposure due to the proposed road scheme.
- 3.11 The scheme is supported by both LB Lambeth and WCC.
- 3.12 The scheme will be delivered via the Surface Transport Infrastructure Construction (STIC) contract. Construction timelines and traffic management plans are currently being developed.
- 3.13 The scheme delivers key benefits of safety, security and structural improvements. When each of these elements is considered separately within the business case,

they show good value for money. However, to deliver these benefits, the traffic modelling for the scheme highlights small increases to journey time for all modes. Therefore, when all elements are aggregated together, including the modelled impacts on journey times, the Benefit to Cost Ratio (BCR) is estimated at 1.05:1 i.e., a small positive return. However, as set out in paragraph 3.9, since the modelling was undertaken, there has been a reduction of traffic flows at Lambeth Bridge northern junction by 36 per cent in the morning peak hour and 28 per cent in the evening peak hour and at Lambeth Bridge southern junction by 27 percent in the morning peak hour and 18 percent in the evening peak hour. Given this reduction, a sensitivity test has been undertaken with the journey time disbenefit reduced by 25 per cent, which shows the BCR would be increased to 2.25:1. The operation of the scheme and forecast benefits will be closely monitored post implementation to confirm whether the objectives and forecast outcomes have been achieved.

4 Key Challenges and Opportunities

Key Challenges

- 4.1 Delivery of the scheme will require the removal of roundabouts either side of Lambeth Bridge. A separate piece of work is ongoing to understand where buses will curtail and/or divert for planned and non-planned events after these roundabouts are removed.
- 4.2 We will continue to work with key stakeholders to obtain necessary consents, including Listed Building Consent for Lambeth Bridge, a Section 127 stopping up order for Lambeth Palace, a Private Licence Agreement for the relocation of the palm tree, and Section 8 agreements with WCC and LB Lambeth.
- 4.3 Minimising the impact on buses and other road users during construction will be a key challenge and we will be working closely with our internal teams, stakeholders and supply chain to develop plans for this.

Key Opportunities

- 4.4 Refurbishment works involving waterproofing and deck repair on Lambeth Bridge were delayed from the 2018/19 Structures and Tunnels Investment Programme and reprogrammed for 2025. Through combining with highway and security works on Lambeth Bridge, we are accelerating the new programmed date, enabling the works to be coordinated, creating efficiencies and minimising disruption for customers.
- 4.5 The changes at Lambeth Bridge north and south will anticipate and support changes likely required for the nearby Parliament Square Streetscape Project (PSSP) through moving utilities to a suitable location and coordinating wider road network monitoring. Should the PSSP scheme go ahead, cycle routes through Parliament Square would be connected to wider networks via the Lambeth Bridge cycle facilities.

5 Equalities Implications

- 5.1 Under the Public Sector Equality Duty in section 149 of the Equality Act 2010, as a public authority, TfL must have due regard to the need to eliminate unlawful discrimination, harassment, victimisation, and any other conduct that is prohibited by or under the 2010 Act; and to advance equality of opportunity, and foster good relations, between people who share a protected characteristic and those who do not. Protected characteristics under the Equality Act are age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation, and marriage or civil partnership status (the duty in respect of this last characteristic is to eliminate unlawful discrimination only).
- 5.2 Compliance with the duty may involve, in particular, removing or minimising any disadvantage suffered by those who share a relevant protected characteristic, taking steps to meet the needs of such people; and encouraging them to participate in public life, or in any other activity where their participation is disproportionately low, including tackling prejudice and promoting understanding. In limited circumstances this may require treating people with a protected characteristic more favourably than those without one.
- 5.3 In developing the scheme, there are some features that may impact on people with protected characteristics. These are detailed in the Equality Impact Assessment (EqIA) along with appropriate mitigations. The EqIA and appropriate mitigations will be kept under ongoing review as the project progresses.
- 5.4 Some key impacts from the EqIA are listed below:
 - the design includes shared use, with pedestrian and cycle interaction. These have been reduced to an absolute minimum and remain in the design to enable cycle connectivity;
 - (b) there are six prohibited vehicular movements in the junction operations. This may impact those with protected characteristics, particularly those who are more sensitive to journey time delays and those with cognitive difficulties who may find navigating new routes challenging. The impacts on the surrounding road network are not expected to be significant, but we will work with the boroughs to address any reassignment concerns;
 - (c) HVM protection is required at the ends of the cycle lane on the bridge to comply with NPSA guidance. The spacing may be difficult for some significantly adapted bicycles to enter/exit the lane; and
 - (d) there is no surface level crossing, either existing or proposed, across the western arm at Lambeth Bridge southern junction. Pedestrians will continue to use an underpass which is fully accessible with no steps.

6 Financial Implications

6.1 The pre-construction enabling works referenced in paragraph 1.2 need to take place in 2023/24 while the scheme is in detailed design. This includes moving the palm tree to increase the likelihood of successful replanting. There are Thames

Water assets beneath the roundabout on which the tree currently sits. The chamber in which these assets are housed needs to be lowered and new access created for maintenance purposes before the main construction works commence. If the Thames Water statutory works start, and the full scheme be paused, funding would be required to either reinstate the roundabout or install the proposed new signalised junction, which forms part of the full scheme. We are exploring an option with Thames Water which could reduce the costs of providing them new maintenance and emergency access (currently proposed to be through a new access shaft), by agreeing a temporary traffic management plan. This allows safe access via the current shaft by temporarily diverting traffic away from the junction during periods of planned or emergency works.

- 6.2 The palm tree could be replanted away from the roundabout, with no further financial commitment being made until our capital funding budget is agreed. This would create a delay to the scheme. Should we commit funding to enable the Thames Water works required to enable the scheme, the financial commitment to us would include the necessary works to make good the junction, should the construction of the full scheme be paused. The combined cost of these enabling works is less than £2m which is within the existing granted authority. The removal and replanting of the palm tree signals the start of the scheme, but full financial commitment would only be made once the contract has been issued to start the main construction works.
- 6.3 Further financial details are included as supplementary information in Part 2 in the agenda.

7 Assurance

- 7.1 A full assurance review will be conducted at Gate 4 (end of detailed design) prior to a Programme and Project Authority drawdown request to Investment Group to enable the main construction works to start in spring 2024.
- 7.2 The scheme underwent an assurance review in October 2022 at Gate 3 (end of concept design). There were five recommendations from this review, of which four are open and are on track to be addressed by April 2024. One of these recommendations relates to the business case and investigating if the incremental benefits of integrating the delivery of the heavy maintenance and safety scopes can be quantified.

List of appendices to this report:

Exempt supplementary information is included in a paper on Part 2 of the agenda.

List of Background Papers:

None

Contact Officer: David Rowe, Director of Investment Delivery Planning

Email: <u>davidrowe@tfl.gov.uk</u>