

Committees:	Dates:	
Streets and Walkways Sub-Committee Resources Allocation Sub Projects Sub	03 July 2018 05 July 2018 18 July 2018	
Subject: Temple Area Traffic Review – Bouverie Street	Gateway 3/4/5 Options Appraisal and authority to commence work (Regular)	Public
Report of: Director of the Built Environment Report Author: Saleem Patel	For Decision	

Summary

Dashboard

- (i) Project status: Amber
- (ii) Total estimated cost of whole project: up to £3.0M
- (iii) Total Estimated cost for Bouverie Street: £165k (excluding the £160K for the evaluation of the wider project)
- (iv) Overall project risk: Low to moderate
- (v) Total spend (including committed) to date: £59,000. This includes £44,000 on consultancy, data collection and analysis.

Progress to date

To date, this project has been progressed in two distinct parts, as described in the Gateway 2 report. These were:

- A. A review of the streets within the area controlled by the City Corporation;
- B. A review of the two junctions (Temple Avenue and Carmelite Street) at the Victoria Embankment (controlled by TfL).

The overall objective of the project is to deliver an acceptable balance between improved convenient vehicle movement, appropriate security needs and consequent environmental impacts.

Significant progress has been made on Part A. It was reported in the approved Gateway 2 report that progression of Part B would be delivered separately and led by Vectos, the transport consultant engaged by the Inns. However, there has been limited progress on this element of the project to date. Officers are liaising with Vectos at this time to establish whether the agreed approach remains viable.

In relation to Part A, an independent transport consultant was appointed to carry out the initial study in January 2018. This commenced later than anticipated due to emergency gas works in Tudor Street affecting the data collection.

The consultant's study principally consisted of two elements: (i) establishing the existing evidence/data and any related issues (ii) identifying opportunities and developing options to improve motor vehicle circulation within the area.

Due to the extensive work involved, particularly the huge amount of data analysis required, the consultant's report is still in draft form but is now largely complete following several reiterations as a result of observations and feedback from officers.

Further work such as assessing the options identified for improvement, conducting any necessary consultation and producing cost estimates (other than for Bouverie Street) remains outstanding. However, as Members have requested that proposals for Bouverie Street be brought forward as quickly as possible, officers have advanced this element ahead of the wider project, requiring, in some circumstances, reliance on provisional information or assumptions to be made. This report therefore primarily focuses on Bouverie Street but where appropriate, information relating to the wider area has been included.

More detailed information relating to the wider area can be found in the draft consultant's report which will be made available in the Members reading room.

Proposals for the wider area including the junctions off the Embankment will therefore be separately reported once sufficient progress has been made.

As part of the consultant's work for Part A, comprehensive traffic surveys covering 24 hours per day over a 7-day week were undertaken. The surveys obtained data on existing traffic volumes, composition, speeds, kerbside activity, arrival and departure points. The main findings are summarised below: -

- Bouverie Street is the main entry route into the area, accounting for 51% (1,955 of 3,800) of all vehicles.
- Whitefriars is the main exit route for the area, accounting for 44% (1,662 of 3,800) of all vehicles.
- 20% (771 vehicles) of all traffic entering and exiting the area does so by entering via Bouverie Street and exiting via Whitefriars Street.
- 70% (2,660 of 3,800) of all vehicles were found to be using the area as a through route (spend less than 5 minutes in the area). Of this 27% (718 of 2,660) were goods vehicles
- Speeds in the area generally remained within the 20mph speed limit.
- Most goods vehicles were found to be the smaller 2-axle rigid vehicles, with the highest volume utilising Whitefriars Street and Bouverie Street.

Appendix 1 and 2 provides a visual representation of the key traffic routes in the area.

Appendix 3 provides a further breakdown of the traffic composition specifically for Bouverie Street. From this, it can be seen that, over an average weekday (24 hours) that was surveyed, light goods vehicles comprise some 55% (1,310 of 2,362) of all traffic. In contrast, looking at the largest permitted vehicles, there was only one

articulated lorry with five or more axles and two 4-axle rigid lorries found to be using Bouverie Street.

Vehicle swept path analysis using computer simulation for the largest permitted vehicle type (16.5m articulated lorry) and a typical large delivery lorry (10m long rigid lorry) at all significant movement junctions within the area was carried out by the consultant. For Bouverie Street, this included the junctions at Fleet Street and Tudor Street. Appendix 4 illustrates these swept paths. From these, it can be seen that there is a pinch point in the northern end of Bouverie Street, particularly for left turning HGV's. In this case, vehicles entering Bouverie Street would either need to mount the footway or utilise much more of Fleet Street to complete their left turn. However, the location plan used for this analysis is worse than on site (the corner is actually smoother than shown on the maps) and therefore the over-run is less significant than modelled. Despite this, the consultant has observed some minor damage to the footways in this location, which indicates that some footway over-runs do occur. Furthermore, if the disabled persons' parking bay is occupied, it would be extremely difficult for this manoeuvre to be completed without the need to mount the footway or for multiple attempts to complete the turn.

Swept path analysis for the southern end of Bouverie Street identified a restriction on the left turn manoeuvre for this type of vehicle (16.5m articulated lorry). However, this information is still being verified, as the analysis carried out by officers indicates that this turn is achievable.

The study included measurements of existing carriageway widths to inform if there are any other pinch point locations along the street. The existing layout for Bouverie Street including the carriageway widths are shown in Appendix 5. A summary of these pinch points can be seen in Appendix 6.

Overview of Options

Based on the above analysis, potential options to improve traffic circulation have been suggested by the Consultant. However, officers have expanded these options to present a comprehensive range of options for Member consideration as follows: -

Option 1: Do nothing. Although the consultant has found some potential pinch points along Bouverie Street, the data from the traffic surveys has indicated that the street is very lightly trafficked by larger HGV's. Additionally, Bouverie Street has remained unchanged for several years and public complaints regarding traffic circulation have been very low as are collisions/casualties. The only reported casualties over the last five years relate to the junction with Fleet Street (eight) and Tudor Street (one).

Option 2: Relocate the disabled persons' parking bay and introduce additional waiting & loading restrictions. The current disabled persons' parking bay would be relocated to a position immediately south of the existing cycle hire station. The waiting and loading restrictions would be on both side nearest Fleet Street and on the remaining western side of Bouverie Street would be increased to "at any time" See Appendix 7. This is the option suggested by the consultant to address the

identified movement restrictions whilst minimising impact and balancing local needs.

Option 3: This option includes the additional waiting and loading restrictions as in Option 2, but it includes the removal of all parking bays (diplomatic and disabled). The cycle hire docking station will also be removed or relocated to a nearby location, such as the western end of Tudor Street. See Appendix 8. This option would further enhance the movement function of Bouverie Street as it would address some of the identified but less significant pinch points found by the consultant. This option will have negative impacts for some users including the Polish Consulate and disabled users (and cycle hire users, if not relocated). It will reduce opportunities for drivers to park, service or load from the carriageway. Observations have shown that both the disabled persons' and diplomatic parking bays are very well used and frequently occupied. Cycle hire usage is also expected to be very high, but this is being verified. It is also likely that this option may lead to an increase in traffic speeds due to the removal of all "physical obstructions" The removal or relocation of the cycle hire docking station will require TfL's agreement. There are currently no nearby locations which can accommodate a cycle hire station without the need to remove other on-street facilities such as parking bays. Appendix 8 does not, therefore, show the relocated position for the cycle hire station. If this option were to be approved, detailed consultation would be needed with the Polish Consulate and a detailed Equalities Impact Assessment completed.

Option 4: This option includes all of those identified for Option 3 plus it would include the removal of the advisory contra-flow cycle facility, "at any time waiting and loading restrictions" throughout, and the widening of junction corners. See Appendix 9. This would address all the identified circulation restrictions (including the less significant pinch points) and make turning around corners much easier. This option would have additional negative implications including a reduction of facilities for general pedal cycle users, where northbound cyclists will have to use Whitefriars of Dorset Rise/Salisbury Court. It would also remove any ability to park and service from the street, result in wider crossings points and narrower footways at junctions for pedestrian and may increase traffic turning speeds.

Officers have also considered options for "greening" the area with trees. This has been investigated but as the footways and carriageways along Bouverie Street are narrow, officers would not recommend tree or other planting. This is because of the loss of pedestrian or carriageway space, which would cause obstructions, particularly for the visually impaired pedestrians.

Proposed Way Forward

The Gateway 2 report identified that this project would follow the "complex" route as per the Cost vs Risk analysis matrix as part of the approved project management process. However, as this element of the project is low in value and with low to moderate risks, it is now suggested that progression of the Bouverie Street options follow the "Regular" route.

Based on the data and the consultant's study, officers consider that Option 2 would be appropriate as a proportionate response to address the identified

movement restrictions. To enable this option to be delivered as soon as possible, this report is therefore a combined Gateway 3, 4 and 5.

If Members are minded to approve Option 1, then no further work would be required for Bouverie Street.

If Members are minded to approve Option 2, implementation could commence from November 2018, subject to no material objections being received as a result of the statutory public consultation. If there are objections which cannot be resolved by officers, an update report would be submitted to the S&W Sub for Member consideration and resolution.

If Members are minded to agree Options 3 or 4, discussions with TfL would commence immediately and assuming that they agree to the removal or relocation of their cycle hire station speedily, statutory public consultation would then follow in Quarter 3 of 2018/19. A Gateway 5 report would then be presented in Quarter 4, to confirm costs, legal position, to consider and potentially offer resolution options to resolve any objections. If such objections are resolved speedily then works could commence in early 2019/20.

Evaluation of the wider area together with the review of the junctions onto/off the Embankment is still to be progressed subject to confirmation that the Inns consultants, Vectos, remain able to complete this work. Progress on this matter and the wider street network will be subject to further reports.

Procurement approach

All highway works will be carried out by the City's term contractor, J. B. Riney.

Work to remove or relocate the cycle docking station will be undertaken by TfL or their agents.

Legal Implications

In relation to Options 3 & 4, the City entered into agreements with TfL in 2009 and 2012 to provide the cycle hire station. The location of this and all other cycle hire stations are regulated by the agreements and are intended under the agreements to remain in their designated location unless or until the scheme (cycle hire) is terminated, or where a material adverse changed circumstance arises. Only TfL has the power under the agreements to remove the cycle hire station. The City would need to negotiate with TfL to obtain its approval to the removal or re-siting of the same.

The City Corporation must have regard to their overall traffic management duties of securing: the efficient use of the road network, expeditious, safe and convenient movement of traffic, and avoiding congestion and disruption.

Financial implications

There are no financial implications associated with Option 1.

The estimated cost to deliver Option 2, is £15,000 including fees and staff costs.

The estimated cost to deliver Option 3 is in the region of £125,000 which includes a provisional sum of £100,000(based on costs of other past examples), to relocate the cycle hire station.

The estimated cost to deliver Option 4 is in the region of £140,000. This estimate currently does not include any alterations to affected utility equipment which is subject to further assessment.

To progress either Options 3 or 4 to Gateway 5, a funding of £22,000 (£12k staff, £10k fees) will be required.

Costs associated with the proposals for the wider area and the review of the two junctions with the Embankment will be provided separately, as part of further future reports.

The Gateway 2 report for this project identified that the whole project could cost £3.0M to be funded from the OSPR. Of that, Members agreed a funding of £160,000 to get project to the next Gateway (Gateway 3). So far £49,000 has been spent/committed. The remainder sum of £111,000 is still required to complete the evaluation of the wider area, and to work with Vectos to review the two junctions at the Embankment.

To deliver the most expensive option (Option 4) for Bouverie Street as identified in this report, a provisional sum of £140,000 would be required. This does not include the costs associated with diverting any utility services (as this is still being confirmed). Any additional funding implications as a result of this, and confirmation of the cost for the relocation of the cycle hire, will be set out in the Gateway 5 report. It is proposed that this would be funded from the OSPR, as originally outlined in the Gateway 2 report or CIL, if this was more appropriate. Request for OSPR or CIL funding requires the approval of the Resource Allocation Sub committee.

Recommendations

The **S&W Sub-Committee** is recommended to:

1. Advise which Option they wish officers to progress.
 - a. If Option 1 is agreed, then no further action will be taken.
 - b. If Option 2 is agreed, the next stage would be to proceed to implementation, subject to no material objections being received as a result of statutory public consultation.
 - c. If Option 3 or 4 is agreed, then the next stage would be to prepare the Gateway 5 report.

Subject to the recommendation of the S&W Sub, the **Project Sub** is asked to

2. Agree to proceed with the project as agreed by the S&W Sub.
3. Agree to the revision of the Project Management route from “complex” to regular for this element of the project.

Subject to the recommendations of the S&W and the Project Sub-Committees, the **Resource Allocation Sub** is asked to

4. Agree funding of either:
 - a. £15,000 to deliver Option 2 to be met from the On-Street Parking Reserve (OSPR) **or**
 - b. £22,000 to progress either Options 3 or 4 to Gateway 5, to be met from the OSPR
5. If Option 3 or 4 is approved, agree a works budget, to be funded from the OSPR, of
 - a. £125,000 to deliver Option 3 **or**
 - b. £140,000 to deliver Option 4.

Options Appraisal Matrix

See attached.

Appendices

Appendix 1	Dominate local access/egress traffic routes in the area
Appendix 2	Dominate through traffic routes in the area
Appendix 3	Traffic composition for Bouverie Street
Appendix 4	Swept path analysis for Bouverie Street
Appendix 5	Existing layout of Bouverie Street and widths
Appendix 6	Summary of pinch points
Appendix 7	Option 2 proposals
Appendix 8	Option 3 proposals
Appendix 9	Option 4 proposals

Contact

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Options Appraisal Matrix

Bouverie Street Options

	<i>Option 1</i>	<i>Option 2</i>	<i>Option 3</i>	<i>Option 4</i>
1. Brief description	Do nothing. The current layouts remain as they are.	<p>Relocation of the disabled persons parking bay and additional waiting & loading restrictions. See Appendix 7.</p> <p>Bouverie Street is the main access route into the area for all traffic including HGVs.</p> <p>The swept path analysis identified a potential pinch point which would restrict HGV movements at the Fleet Street junction and the existing disabled persons parking bay.</p> <p>However, it has been noted that the location plan used for this analysis is worse than on site (the corner is actually smoother than shown on the maps) and therefore the over-run is less significant than modelled.</p> <p>The proposed relocation of the disabled persons' parking bay to a location immediately south of the cycle hire station will remove this pinch point.</p>	<p>Additional waiting and loading restriction as in Option 2 plus the removal of all parking bays (diplomatic and disabled). The cycle hire docking station would also be removed or relocated. See Appendix 8.</p> <p>This would effectively clear Bouverie Street from any physical "obstruction" caused either by the cycle hire station or vehicles parked in the designated parking bays.</p>	As Option 3 plus the removal of the advisory contra-flow cycle facility, "at any time waiting and loading restrictions" throughout and the widening of junction corners. See Appendix 9.

	Option 1	Option 2	Option 3	Option 4
		It has also been identified that there is the potential for vehicles to park on the single yellow lines thereby restrict movement, especially if parking takes place opposite the existing parking bays, cycle hire station or opposite each other. Additional waiting and loading restrictions would therefore help to keep a route through Bouverie Street clear of obstruction caused by parking in the scenario described above.		
2. Scope and exclusions	N/A	<ul style="list-style-type: none"> The diplomatic parking bays, cycle hire docking station, advisory contra-flow cycle lane and kerb line changes are excluded. 	<ul style="list-style-type: none"> The contra-flow cycle lane and kerb line changes are excluded 	<ul style="list-style-type: none"> Any diversion of utility equipment is excluded, as this is still being assessed
Project Planning				
3. Programme and key dates	N/A	<ul style="list-style-type: none"> July – Sept 2018: Statutory public consultation November 2018: Implementation 	<ul style="list-style-type: none"> July onwards: Dialogue and discussions with TfL on the removal of the cycle hire station Q3 of 2018/19: Statutory public consultation Q4 2018/19: Gateway 5 report (authority to commence works). Early 2019/20: Implementation 	
4. Risk implications	No significant risks envisaged.	Potential for formal objections from members of the public and	As those stated for Option 2 plus	

	Option 1	Option 2	Option 3	Option 4
	<p>Although the consultants work identified a potential restriction on access movement at the northern end of Bouverie Street, the volume of HGV's using Bouverie Street is very low and considered acceptable.</p>	<p>will therefore require appropriate resolution before it can proceed.</p> <p>The "at any time" waiting and loading restrictions will reduce the availability of kerbside space for servicing and delivery vehicles, however, there are still space for these activities to take place on the eastern side but further away from Fleet Street.</p> <p>The loss of loading and servicing areas close to Fleet Street may transfer loading and servicing elsewhere (including on restricted streets) and could impact on traffic flow.</p>	<p>Observations by officers have shown that the disabled bays are well used. Its removal would therefore have a direct impact on them.</p> <p>Observations by officers have also shown that the two diplomatic parking bays are well used and therefore unlikely to be supported by the Polish Consulate. It is possible to convert two of the nearby parking bays (such as those on Tudor Street) to maintain this facility but this would be further from their building.</p> <p>The removal or relocation of the cycle hire station requires TfL's agreement. It is unlikely that their agreement would be readily given bearing in mind that demand for cycle hire is very popular and that there is a lack of cycle hire stations in the City, particularly near to Fleet Street.</p>	
5. Benefits and disbenefits	<ul style="list-style-type: none"> Status quo maintained 	<ul style="list-style-type: none"> Improved access for HGVs into the area. Loss of space for parking (outside the existing single yellow restriction), servicing and loading 	<ul style="list-style-type: none"> As in Option 2 plus Further enhancements for traffic circulation Loss of cycle hire provisions in the area (if not relocated) Loss of one parking bay for disabled users. Loss of diplomatic parking provisions (if not relocated) for the Polish Consulate Potential for higher traffic speeds due to clearer carriageway 	<p>As Option 3, plus</p> <ul style="list-style-type: none"> Loss of provision for pedal cyclists Loss of kerbside space for local servicing and loading Narrower footways at junctions for pedestrians Wider crossing points for pedestrians at junctions where the majority of pedestrian cross.

	<i>Option 1</i>	<i>Option 2</i>	<i>Option 3</i>	<i>Option 4</i>
				<ul style="list-style-type: none"> Potential for higher turning speeds, particularly for smaller vehicles.
6. Stakeholders and consultees	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> The Access Team Local occupiers and Ward Members Organisations representing road user including the emergency services will be consulted as part of the statutory consultation process. TfL in relation to potential implications to the Strategic Road Network (Fleet Street). 	<ul style="list-style-type: none"> As with Option 2 plus TfL (for any potential implications on Fleet Street and cycle hire station) Comptroller Pedal cycle users and groups Polish Consulate 	
Resource Implications				
7. Total Estimated cost	£0	£15,000	£125,000	£140,000
8. Funding strategy	N/A	Funding from On-Street parking Reserve (OSPR) will be sort.		
9. Estimated capital value/return	N/A	N/A	N/A	N/A
10. Ongoing revenue implications	N/A	On-going maintenance of signs and road markings will be required but this is contained within existing business as usual resources.		
11. Investment appraisal	N/A	N/A	N/A	N/A

	<i>Option 1</i>	<i>Option 2</i>	<i>Option 3</i>	<i>Option 4</i>
12. Affordability	N/A	The estimated costs across the options are fairly modest. However, there is a significant call for funding for fund other projects across the corporation from both the OSPR and CIL. Priority for funding is being considered by the Corporate Priorities Board and will form their recommendations to the Resource Allocation Sub.		
13. Legal implications	None	<p>The proposals to relocate the disabled persons parking bay and “at any time” waiting and loading restrictions require statutory public consultation to be carried out. Any objections received will require appropriate consideration and resolution before it can proceed.</p> <p>TfL’s approval may be required (under the Traffic Management Act) if the proposals affect the expeditious movement of traffic on Fleet Street.</p>	<p>As with Option 2. Additionally, the City entered into agreements with TfL in 2009 and 2012 to provide the cycle hire station. The location of this and all other cycle hire stations are regulated by the agreements and are intended under the agreements to remain in their designated location unless or until the scheme (cycle hire) is terminated, or where a material adverse changed circumstance arises. Only TfL has power under the agreements to remove the cycle hire station. The City would need to negotiate with TfL to obtain its approval to the removal or re-siting of the same.</p> <p>The City Corporation must have regard to their overall traffic management duties of securing: the efficient use of the road network, expeditious, safe and convenient movement of traffic, and avoiding congestion and disruption.</p>	
14. Corporate property implications	None	None. The City Surveyor has confirmed that proposals for Bouverie Street would not affect or have any impact on the New Combine Court development.		
15. Traffic implications	None	No significant implications envisaged.		
16. Sustainability and energy implications	N/A	N/A	N/A	N/A
17. IS implications	None	None	None	None

	<i>Option 1</i>	<i>Option 2</i>	<i>Option 3</i>	<i>Option 4</i>																				
18. Equality Impact Assessment	N/A	An equality impact assessment will be carried. Any material implications will be considered and if necessary, reported back for further Member consideration.																						
19. Recommendation	Not recommended	Recommended	Not recommended	Not recommended																				
20. Next Gateway	Choose an item.	Choose an item.	Gateway 5 - Authority to Start Work	Gateway 5 - Authority to Start Work																				
21. Resource requirements to reach next Gateway	<p>If Members agreed to Option 2 the estimated cost to implement the measures is £15,000. A breakdown of this is provided in the table below.</p> <table border="1"> <thead> <tr> <th>Item</th> <th>Reason</th> <th>Cost (£)</th> <th>Funding Source</th> </tr> </thead> <tbody> <tr> <td>Staff Cost</td> <td>Project Management and works co-ordination</td> <td>£4,000</td> <td>OSPR</td> </tr> <tr> <td>Fees</td> <td>Statutory public consultation & notices</td> <td>£5,000</td> <td>OSPR</td> </tr> <tr> <td>Works</td> <td></td> <td>£6,000</td> <td>OSPR</td> </tr> <tr> <td>Total</td> <td></td> <td>£15,000</td> <td>OSPR</td> </tr> </tbody> </table>				Item	Reason	Cost (£)	Funding Source	Staff Cost	Project Management and works co-ordination	£4,000	OSPR	Fees	Statutory public consultation & notices	£5,000	OSPR	Works		£6,000	OSPR	Total		£15,000	OSPR
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	<p>If however, Options 3 and 4 are agreed, then the resources required (same for both options) to reach the next Gateway (Gateway 5) is detailed below.</p> <table border="1"> <thead> <tr> <th>Item</th> <th>Reason</th> <th>Cost (£)</th> <th>Funding Source</th> </tr> </thead> <tbody> <tr> <td>Staff Costs</td> <td>Project Management, Reporting, agreement with TfL</td> <td>£12,000</td> <td>OSPR</td> </tr> <tr> <td>Fees</td> <td>Statutory public consultation and surveys</td> <td>£10,000</td> <td>OSPR</td> </tr> <tr> <td>Total</td> <td></td> <td>£22,000</td> <td>OSPR</td> </tr> </tbody> </table>				Item	Reason	Cost (£)	Funding Source	Staff Costs	Project Management, Reporting, agreement with TfL	£12,000	OSPR	Fees	Statutory public consultation and surveys	£10,000	OSPR	Total		£22,000	OSPR
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