Committees:	Dates:	Item no.
Streets and Walkways Sub-Committee	22/02/2016	
Projects Sub	25/02/2016	
Subject:	Issue Report	Public
Bank Junction Experimental Scheme		
Report of:		For Decision
Director of the Built Environment		

Summary

Dashboard

Project Status: Green

Timeline: next Gateway - 4/5

Total Estimated Cost: £500,000 - £620,000 Spend to Date: approximately £79,000

Overall Project Risk: Green

Last Gateway approved

Gateway 2

- Progress to date including resources expended
 - The traffic modelling base information has been created and further detailed modelling has been commissioned.
 - Air quality monitoring has been commissioned.
 - Working groups have been set up.

Summary of issues

- 1. Funding: The level of funding from Transport for London (TfL) had not been confirmed at the time of the 10 December 2015 Policy & Resources Committee.
- 2. Design Options: A decision on which design option is to be pursued is needed in order to progress the scheme to detailed traffic modelling. TfL have stated that detailed traffic modelling can only occur on one option as it is a process that takes six months and requires significant resources.

On 1 December 2015, Members of the Project Sub-Committee agreed that officers should develop more than one option in proposing an Experimental Safety Scheme for Bank Junction. This view was supported by the Policy & Resources Committee.

Officers have therefore given further consideration to restricting traffic movement through Bank Junction based on the following 3 options:

- A. All six arms (i.e. the whole junction)
- B. King William Street and Princes Street (i.e. north/south movement)
- C. Poultry and Cornhill (i.e. one east /west movement)

Diagrams of these options are included in Appendix 1.

Proposed way forward

1. Funding

The City has secured a £120,000 commitment from TfL. This covers the full amount that was considered necessary for the immediate progression of the scheme and is available to spend on this project up to the end of the 2015/16 financial year. More funding for 2016/17 is expected.

2. Design Options:

There is now enough information to narrow down the number of options from three to one as is now required by TfL. The approved option will progress to detailed traffic modelling.

Officers consider design Option A (restricting motor vehicles from entering the junction on all arms) will deliver significantly better outcomes against all the project objectives. In particular, the research shows that the benefits of this option over the other two options to be:

- more than double the casualty reductions,
- almost double the average journey time benefits for bus passengers,
- significantly better average journey time benefits for general traffic and
- significantly better comparative air quality benefits.

Recommendations:

It is recommended that Members:

- 1. Approve the budget to reach the next Gateway of £300k, subject to additional funding of at least £60k being received from TfL in the next financial year (please see appendix 2 for further information);
- 2. Approve Option A to be progressed through detailed design (during this time the inclusion, or not, of taxis will be decided) to gateway 4/5 (authority to start work).
- 3. Note the final design and request for authority to start work will be reported to the Streets and Walkways and Projects Sub Committees and as well as the Policy and Resources Committee for approval.

Main Report

1. Issue description

1. Funding:

Members approved an initial allocation of £120,000 so that this scheme could progress. This utilises the Mondial House S106 Transport contribution.

Additional funding of £120,000 has also been secured from TfL for this scheme. Further funding is being sought for use after the 2015/16 financial year.

The use of the committed funds from TfL in 2015/16 and the Mondial House S106 funds will allow the scheme to progress until such time as TfL approves further funds to be used after the 2015/16 financial year. TfL has indicated that it is likely to fund the scheme up to £500,000.

Appendix 2 sets out the proposed budgets required to reach the next gateway (£300,000) and the whole project (£500,000-£620,000) along with the potential sources of funding.

2. Design Options:

Members of the Policy and Resources Committee approved the development of three options for the experimental scheme that looked at restricting access through Bank Junction for motor vehicle classes (except buses and possibly taxis).

A comparison of the three options against the objectives is shown in the table below. The values shown are for access to be restricted for motor vehicles (except buses) between 7am and 7pm, Monday to Friday.

	Option A	Option B	Option C
Casualty Reduction (%)	60	30	19
Average Bus Journey Time			
Reduction (seconds)	84	54	48
Average General Traffic			
Journey Time Reduction			
(seconds)	90	66	66
Junction Air Quality			
Improvements	**	*	*

^{*} some benefits

The expected outcomes for Option A are significantly better than the other two options for each criterion. The following paragraphs provide greater detail to the table above.

^{**} significant benefits

^{***} maximum benefits

Casualty reduction:

There were 118 casualties over a five year period in the Bank area that the collision analysis assessed. The options considered for the Interim Scheme can effect up to 94 of these. The casualty reductions for the options are based on the assumption that the collisions would not have occurred if the vehicle type involved had not been permitted into the junction. This results in casualty savings of:

• Option A: 56 (60% of the 94)

Option B: 28 (30%)Option C: 18 (19%)

Alternatives to restricting vehicle types (eg banning certain turning manoeuvres did not provide anywhere near the level of casualty savings considered necessary. Earlier work looked at these alternatives and included banning turning movements and signal timing changes.

Appendix 3 contains further analysis of the casualties that occur at the main junction with information on:

- The mode types involved
- Time of day
- Common causation factors

Journey times:

All three options showed an improvement in average bus and general traffic average journey times across the entire modelled area when compared to doing nothing, with Option A having the greatest benefit (with an average improvement of 84 seconds for buses and 90 seconds for general traffic). This is based on the feasibility traffic modelling of the options which compared journey times of all vehicles entering and exiting the study area during the AM and PM peak periods to provide the average journey time. Appendix 4 shows the journey times for general traffic and buses for all three options.

The detailed traffic modelling that is still to take place with TfL will provide greater clarity about the changes to specific vehicle journey times, such as on specific streets and routes, as well and the increase in vehicle numbers on different routes.

Air quality:

Air quality at Bank Junction will benefit the most from Option A due to the largest removal of vehicles from the junction. Although there may be a shift of air pollution to other streets as vehicles use other routes, the shift will be away from Bank which

		has significantly higher recorded levels of NO ₂ than the surrounding streets. There may be other mitigating measures that can be implemented in the wider area to assist with the increases in other locations.	
		It is recommended that Option A is progressed through detailed design including detailed traffic modelling. During this, the inclusion, or not, of taxis will be decided.	
2.	Last approved limit	The previous committee report stated that £120,000 was the immediate budget allocation that was necessary.	
3.	Options	Option A is recommended as feasibility traffic modelling and research shows it performs significantly better against all the project objectives than the other two alternative options.	

Appendices

Appendix 1	Design Options Diagrams
Appendix 2	Financial Information and budget set up
Appendix 3	Collision Analysis
Appendix 4	Journey Times

Contact

Report Author	Jereme McKaskill
Email Address	jereme.mckaskill@cityoflondon.gov.uk
Telephone Number	020 7332 3580