Committee(s):	Date(s):
Streets & Walkways Sub-Committee (**For Decision)** **Projects Sub-Committee** (**For Decision)**	**10/03/2014** **02/04/2014**

Subject: Outcome Report - Cheapside Area Strategy Improvements	**Public**
Report of: **The Director of the Built Environment**	**For Decision**

Summary

Dashboard

Project status - Green;
Total original estimated cost - £6.48M
Total actual spend - £4.61M
Overall project risk – Green (completed)

Brief description of project

In November and December 2008, Members approved the Cheapside Area Strategy. The Cheapside Area Improvements form the backbone of this Area Strategy. In May 2009 the Court of Common Council approved a major project that looked to make substantial improvements to the transport environment and public realm whilst maintaining the needs of all road users.

The improvements were delivered over four stages, which encompassed the streets of Cheapside and Poultry in their entirety. It also included a complete redesign of the Cheapside/New Change junction and improvements to Bread Street and the Sunken Garden pocket space at the Cheapside/New Change junction. The project later expanded to include the Gresham Street/St Martin's Le Grand/Aldersgate Street junction (as Stage 4a) but this is not included in this outcome report as it is subject to an on-going trial of its effectiveness.

The project has been funded through a combination of Section 106 agreements (£2.56M), On Street Parking Reserve (OSPR) (£1.20M) and Transport for London (£0.85M).

Members had agreed that the OSPR provide up to £2.97M (including £230,000 towards Cheapside Stage 4a) of underwriting funding towards this project. It is now possible to release the remaining £1.54M from this underwriting.

The project has been very successful both in terms of the outcomes achieved and the delivery of it. All outcomes have either been achieved or exceeded; in particular the streets are now better and safer for road users, occupiers and visitors. It is now a vibrant destination, meeting current needs and is well placed to meet future growth.

The project management approach enabled the project to be controlled and managed effectively ensuring it is on programme, budget and scope.

Persistence in value engineering and the use of innovative techniques such as radar technology to identify utility depths enabled, amongst other things, the project to be delivered below budget.

The value of partnership working with the term contractor and their awareness and experience of the City, their flexibility and ability to accommodate changes and requirements cannot be understated and is a major factor contributing to the success of the project.

The success of the project has been nationally recognised by winning the prestigious "The Chartered Institution of Highways & Transportation" Streets award in 2013.

Recommendations

I recommend that Members:-

- Note the contents of this report;
- Agree to close Stage 1 to 4 of the project; and
- Agree that the balance of £0.47M from the Section 106 funds be released back to the pooled funding for Transport improvements at or in the vicinity of Bank station.

Overview

1. Evidence of Need	The transport infrastructure and quality of the public realm along Cheapside and Poultry were poor. The unnecessarily wide carriageway meant motor vehicles dominated the street making it less safe, and the environment did not properly reflect the status of Cheapside as a major retail and office destination. In addition there was a need to support a number of major re-developments in the area and the resulting significant increase in pedestrian footfall whilst ensuring the needs of all street users were accommodated.
2. Project Scope and Exclusions	The Cheapside project was split into four stages to enable better project management and for a funding strategy to be put in place to deliver the improvements. The project included the entire length of Cheapside and Poultry and encompassed the Cheapside/New Change junction as well as the Sunken Garden pocket space and streets surrounding One New Change. A plan of the project by stage is provided in Appendix 1 and a general arrangement plan is provided in Appendix 2. The project was then extended to include the Gresham Street/St Martin's Le Grand/Aldersgate Street junction. This work stream, to facilitate two-way traffic, is being treated separately and is subject to further assessment. It is therefore not included in this outcome report.
3. Link to Strategic	The improvements fully accord with the City's strategic aims

<table>
<tr><td>Aims</td><td>including:
To provide modern, efficient and high quality local services and policing within the Square Mile for workers, residents and visitors with a view to delivering sustainable outcomes.
The improvement measures are in line with the relevant policies at the time of evaluation and design. Notably The City together Strategy: The Heart of a World Class City 2008-2014 and the Unitary Development Plan policies.</td></tr>
<tr><td>4. Within which category does the project fit</td><td>7A – Asset Enhancement/Improvement</td></tr>
<tr><td>5. What is the priority of the project?</td><td>Advisable.</td></tr>
<tr><td>6. Resources Expended</td><td>A total of £4,607,721 has been expended in delivery of the Cheapside scheme.
The table below provides an overall summary of the expenditure.
Table 1. Resources expended
<table>
<tr><th>Description</th><th>Resources Expended</th></tr>
<tr><td>Stage 1</td><td>£942,563</td></tr>
<tr><td>Stage 2</td><td>£2,020,262</td></tr>
<tr><td>Stage 3</td><td>£1,127,129</td></tr>
<tr><td>Stage 4</td><td>£517,767</td></tr>
<tr><td>Total</td><td>£4,607,721</td></tr>
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<u>Outturn Assessment</u>

<table>
<tr><td>7. Assessment of project against Success Criteria</td><td>The project has met or exceeded the objectives as set out previously. These are summarised below.
<table>
<tr><th>Objective</th><th>Outcome</th></tr>
<tr><td>Reduce motor vehicles dominance and traffic speeds</td><td>The carriageway width has been reduced from an average of 14 metres to an average of 8 metres. The Cheapside/New Change junction has also been completely redesigned. All of this has reduced the vehicle dominance and traffic speeds.
Traffic speeds before and after implementation has been recorded for both Cheapside and Poultry. This shows that speeds have reduced. In Cheapside the reduction is from 26mph down to 22mph. The</td></tr>
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		reduction in Poultry is from 24mph to 21mph. These are the 85th percentile speeds, which is the speed at which 85% of drivers are driving at or below. Average speeds for Cheapside were 20.5mph in 2006 and 16.8mp in 2013, a reduction of 3.7mph. (The average speed is a "spot mean speed" typically obtained between two points of greatest potential for free-flowing traffic conditions).Traffic and pedestrian surveys have also been carried out before (in 2006) and after (in 2013) implementation. The surveys covered 12 hours between the hours of 7am to 7pm, and have shown some very encouraging and interesting data. Total traffic flows have overall increased. However, motor vehicles using Cheapside and Poultry have reduced between 2006 and 2013 from 7,723 to 7,277 in Cheapside, and 6,378 to 6,267 in Poultry. This is in spite of a significant increase of over 430 buses per day (arisen from the replacement of the Bendy buses to conventional buses). Medium size lorries have also had an increase of 113 vehicles in Poultry but remain at similar levels along Cheapside. In 2006, there were 871 cyclists per day compared to 2124 in 2013. This represents an increase of 2.5 times and making up to 23 % of the total vehicle composition. With this user group added into the total traffic flow, total volumes have increased from 8594 to 9401 in Cheapside. During the am peak, cyclist make up 45% of the vehicle composition, nearly 3 times more than the next user group which are taxis at 17%. During the pm peak, taxi's make up the highest user group at 34%, but is closely followed by cyclist's at 31%. This is almost double the next user group which are cars at 16%. Trends in motor vehicle flows in the City have been reducing over the last decade or so. Cycling has however been growing. The traffic flows in Cheapside and Poultry are therefore more likely to be part of this overall trend rather than as a result of the changes made. Pedestrian numbers in both Cheapside and Poultry have increased by 50% (from 24,487 to 36,728 per day) and 38% (from 26,783 to 37,000 per day) respectively.
	Road safety	Analysis of injury collision data has shown that the

project has improved road safety.

The following tables provide a comparison of the collision data before and after implementation.

Table 2. Average annual collisions per year resulting in injury.

	Av. no. of collisions per annum	No. of serious collisions per annum
Before	9	1.33
After	7.25	0.92
% reduction	19%	31%

It can be seen from the above table that the average annual collision has reduced from 9 to 7.25 per annum, representing a 19% reduction. Collisions resulting in serious injuries have also reduced by about a third.

Table 3. Average No. of injuries per year by user group

	Motor Vehicle	Motor Cyclists	Cyclist	Peds	Total injuries
Before	1.67 (17%)	2.67 (28%)	3 (31%)	2.33 (24%)	9.67 (100%)
After	4.76 (55%)	0.4 (5%)	0 (0%)	3.4 (40%)	8.57 (100%)

Table 3 shows a comparison of the injuries sustained amongst the different user groups. It can be seen that the project has been very effective at reducing injuries to pedal cyclists (none recorded since completion) and to motor cyclists.

Injuries to pedestrians have increased by about one or 45%. Most of these occurred as a result of their error, for example they failed to look or judge properly. Another factor for this increase is likely to be attributed to the fact that more pedestrians are now using Cheapside than before. (45% increase in pedestrian numbers).

Injuries to motor vehicle drivers or to their occupants have had a significant increase, by almost 3 fold.

		Most of these, including a drunken driver, have occurred at the Cheapside/new Change junction. The assessment has identified that a factor in the increase could be related to the sequencing of the southbound traffic signals. As TfL are responsible for traffic lights in London, officers are in discussions with them to have the sequencing altered. During the early stages of completion, a significant number of comments were received on the poor design of the carriageway widths and how this has made cycling along Cheapside more dangerous. As a result of this, further assessments were carried out. The findings showed that cycling along Cheapside was actually better as drivers offered cyclists more room whilst overtaking than at another similar location. Pedestrian countdown timers have also be added to the Cheapside/New Change junction. This has helped pedestrians, by letting them know how long they have left to cross the road after the green man light has gone out. This has appeared to have improved pedestrian safety and traffic capacity.
	Create an attractive environment by improving the street scene	High quality design and materials such as York stone and Granite have been used throughout. Other improvements contributing to create an attractive environment includes, 19 large specimen trees planted (out of 23 originally proposed), lighting improvements (street lights as well as uplighters), renewal of the sunken garden, architectural seating, way-finding signage and the removal of street clutter.
	Create an inclusive and vibrant area	The needs of all street users have been accommodated. The spaces created now offer opportunities for functions, events, gatherings and socialising.
	Improve pedestrian convenience	Cheapside and Poultry have been totally remodelled to provide a much more pedestrian friendly environment. Carriageway widths have been substantially reduced, regular street crossings, including courtesy crossings and wider crossing points, have been provided. Footways are much wider and street clutter removed to improve pedestrian flow and reduce over-crowding. Seating, greenery, pedestrian countdown timers and better lighting have also contributed towards a positive pedestrian environment.

	Improve cycling facilities	The design accommodates future cycling growth by creating an environment that is safer to cycle on and for cycles to make better use of the carriageway. Traffic speeds have reduced. The number of cycle parking racks has doubled. Inset loading bays (off the running lane) have been incorporated to reduce conflicts. Junctions have mandatory lead in lanes and prohibited movements (where possible) have been removed to facilitate cycle permeability.
	Improve accessibility	The narrowed carriageway, widened and de-cluttered footways, the redesigned Cheapside/New Change junction and courtesy crossings make it easier for pedestrians, including those with mobility impairments, to navigate this area. The sunken garden has been improved and includes a ramp for easy disabled access. Traffic signals include measures which also assist pedestrians with visual and hearing difficulties. Along Cheapside, there are a number of loading and taxi bays that have been incorporated into the footway. The design enables pedestrians to utilise that space if it is not occupied by vehicles. This is particularly useful during high pedestrian periods such as during lunch time. These bays have been design and implemented using granite setts. It has been found that this material provides a “neutral” ground between pedestrians and motor vehicles i.e. the bays are readily used by pedestrians when vacant. Some comments have been received regarding the design of the taxi bay by One New Change. As the design is incorporated into the footway, it avoids a kerb up-stand. This has meant that when an access ramp is deployed (for wheelchair users to access or egress from a taxi), the gradient is either very steep or that a separate ramp extension needs to be attached. This is therefore not ideal so an alternative taxi bay with a full kerb up-stand is being investigated in New Change.
	Facilitate retail opportunities	The improvements create an attractive and vibrant destination and have facilitated retail businesses to hold events and functions.
	Provide places to rest	The sunken garden has been rejuvenated to provide a secluded place to rest. A stone bench, located west of Foster Lane has also been incorporated, providing further places to rest.

Encourage vehicles to service buildings off-street	The design has provided only limited locations for on-street servicing and these are located off the running lanes. The carriageway width has also been selected to discourage on-street servicing. Bread Street has been widened to improve access to off street servicing areas. Loading surveys carried out before the project showed a total of 389 vehicles servicing on street between 7am to 7pm. This compares with 201 vehicles post implementation. No adverse impact has been reported as a result of this.
Facilitate street functions.	Wide footway areas as well as new public spaces provide opportunities for street functions. Since completion, a number of street functions have or are to be held in Cheapside including shopping, sporting and traditional events. Some notable events include a Christmas shopping day, Cheapside Street Fayre and the Lord Mayor's Show.

In recognition of the success of the project, it won the prestigious 'The Chartered Institution of Highways & Transportations' Streets Award in 2013. "The judges considered this to be an outstanding scheme which successfully addressed the balance between movement and place. It was seen to be a key component of a strategy to raise the standard of streetscape within a wide area. This was emphasised by adopting an unfussy approach as well as by the use of high quality materials. The judges were particularly impressed with the partnership approach adopted throughout the delivery of the scheme and also by the very high standards of workmanship" This project competed against other national street projects such as Poynton Town Centre, Church Street Square in Birmingham and Oxford Street East. A summary of the award is provided in Appendix 3.

Responding to complaints is also an important aspect for the success of the project. The project included a lot of public facing information including interfaces with a dedicated contactor on site, communicating and managing local issues. Nonetheless, there were still a handful of complaints, mainly regarding noise disturbances and lengthy pedestrian diversions. All the complaints were quickly resolved by amending when and how the works were undertaken or providing occupiers with advance information.

8. Programme

The key delivery milestones as set out initially are shown in table 4, and are compared against the actual delivery periods.

Table 4. Delivery Programme

Key Milestones	Delivery Period	Actual Delivery Period
Design/Evaluation Report Approval	May 2009	May 2009
Completion of Stage 1	July 2010	October 2010
Completion of Stage 2	September 2010	December 2010
Completion of Stage 3	Spring 2011	July 2011
Completion of Stage 4	Initially Uncommitted (Early 2012)	May 2012 (with outstanding elements deferred to post Olympics)

This shows that the project was delivered within the overall timeframe as specified in the original programme.

9. Budget

Table 5 provides details of the actual cost of each stage and compares it against the design estimate.

Table 5. Stage costs

Description	Design Estimate	Actual	Variance
Stage 1	£1.03M	£0.94M	£(0.09)M
Stage 2	£3.06M	£2.02M	£(1.04)M
Stage 3	£1.40M	£1.13M	£(0.27)M
Stage 4	£0.99M	£0.52M	£(0.47)M
Total	**£6.48M**	**£4.61M**	**£(1.87)M**

It can be seen that a substantial under spend has been achieved. The majority of this under spend has come from un-used utility diversions (£1.20M) and civil engineering work (some £450,000), achieved through "value engineering", and un-used contingency (£175,000).

In order to progress the scheme £2.97m of the OSPR was agreed by Members to underwrite the funding. The actual cost and funding mechanism is shown on table 6, below.

Table 6. Funding mechanism

Stage	S106 contribution	On Street Parking Reserve	TfL	Total
Stage 1	£0.94M	-	-	£0.94M
Stage 2	£1.1M	£0.53M	£0.39M	£2.02M
Stage 3	-	£0.67M	£0.46M	£1.13M
Stage 4	£0.52M	-	-	£0.52M
Total	**£2.56M**	**£1.20M**	**£0.85M**	**£4.61M**

From table 6, it can be seen that only £1.20M of the OSPR was needed. A further £230,000 was required for the evaluation, design and implementation of Stage 4a. The total call on the OSPR was therefore £1.43M. The remainder, £1.54M can now be released from this underwriting and returned to the OSPR.

A total of £0.99M from various S.106 agreements was allocated to deliver Stage 4. These S.106s were pooled funding to be used at Bank (or in the vicinity of Bank). Since this Stage has now been completed at a total cost of £0.52M, the remaining £0.47M can now be released back to the pooled funding for Transport improvements at or in the vicinity of Bank.

10. Risk

In order to reduce risk the project was split into four stages. Implementation of each of these stages was not permitted until Members approved each design report. This enabled the funding package to be assessed, adjusted and approved at regular intervals.

Construction – accelerated working and strong communication links ensured that disruption to local occupiers was kept to a minimum.

Stage 1 of the project provided the paving around the One New Change development and the widening of Bread Street. It was vital for the successful delivery of this retail destination that the street works around the building were fully completed and coordinated with the developer's programme.

Another key risk was unknown utility apparatus and concrete conditions below ground. "State of the art" radar technology was used to identify what was likely to be affected. The utility scans were very effective at identifying services that are likely to be affected by the proposals. This lead to the need to carry out some "value engineering" and the rethinking of the design concept. The concrete condition scans achieved limited success because it was a new technique. However it has since been improved and has proved to be valuable on other projects.

The cost of utility diversions can be extremely expensive and the extent of impact can be difficult to establish with a high level of confidence. Adequate cost was built in to ensure that these could be accommodated should the need to divert or amend their apparatus became necessary. It

	should be noted that the utility scans enabled the design to be amended to avoid a lot of costly utility diversions.
11. Communications	Significant communications were undertaken and spanned a couple of years. There were significant internal (various departments and Members) and external stakeholders including City occupiers and users, the Cheapside Initiative, emergency services, bus operators, Transport for London, other organisations and groups. The communication commenced with a public consultation exercise for an area strategy in 2008. Formal Traffic Order consultation and notices followed in 2009, 2010 and 2011, and in the lead up to the works, a communication strategy was adopted to manage the various communication strands which included on-street information, media releases, face to face engagements and other printed materials. This level of communication ensured that the project proceeded successfully.
12. Benefits achieved to date	The benefits achieved to date are summarised in Section 7. However, a summary of the benefits achieved to date are provided below. The project has made significant improvements to the transport and public realm. The streets are now better and safer for road users, occupiers and visitors. It is meeting current needs and is well placed to meet future growth. Appendix 4 provides some before and after images as well as a photomontage of the vision.
13. Strategy for continued achievement of benefits	Cheapside has been designed with the future in mind. The growth in pedestrian footfall with the arrival of Crossrail and the future growth of retail and office space in the City was given due consideration during design. Cheapside is well placed to accommodate this growth.
14. Outstanding actions	Monitoring of collisions, in particular at the Cheapside/New Change junction will continue. This may result in amendments to improve safety.

Review of Team Performance

15. Governance arrangements	A structured project governance arrangement was in place and followed closely the Prince II project management methodology; consisting of:- **A Managing Officer** with overall project responsibility **A Project Director/Sponsor**. Sponsor of the project, provides vision and purpose **A Project Manager,** responsible for day to day delivery of

	project, securing permissions and approvals. **A Design & delivery Team** consisting of designers and contractors **A Project Team**. Consisting of the above plus Environmental Enhancement representative. **A Project Board.** Consisting of senior cross departmental representatives, Managing Officer, Project Director and Manager. Project documentations, also closely following the Prince II methodology and included, a project plan, a project initiation Document, a risk register and issues logs. The project had a unique financial governance arrangement where the Project Manager was authorised to approve budget adjustments up to £5,000. This provided a more efficient process and allowed for quicker amendments to budgets to be applied.
16. Key strengths	The key strengths demonstrated in delivery of this project: • Communication • Partnership approach with the Term Contractor • Lead by a senior officer • Project team • Flexibility in working arrangements • Clear objectives and vision
17. Areas for improvement	Estimates for utility diversions. The use of concrete condition radar scans – the use of this technique should be reviewed to ensure that the information obtained is reliable and of sufficient quality to enable accurate estimates to be derived.
18. Special recognition	Special recognition should go to the Project Team and the Term Contractor, in particular their Contract Manager and Site Manager. In addition, the Environmental Enhancement Team for their prior work on the Area Strategy and consultation.

Lessons Learnt

19. Key lessons and how they will be used and applied	The lessons learnt are provided in Appendix 5. However The key lessons learnt are summarised below: • The project has been very successful both in terms of the outcomes achieved and the delivery of it. All outcomes have either been achieved or exceeded; in particular the

	streets are now better and safer for road users, occupiers and visitors. It is now a vibrant destination, meeting current needs and is well placed to meet future growth. • The project management approach enabled the project to be controlled and managed effectively ensuring it is on programme, budget and to scope. Having a clear vision and achievable objectives from the outset avoids project deviation, facilitates understanding and joined up working within the project team and wider across the organisation. • Persistence in value engineering and the use of innovative and untested techniques such as radar scans of utility service depths has enabled, amongst other things, the project to be delivered below budget. • The value of partnership working with the term contractor and their awareness and experience of the City, their flexibility and ability to accommodate changes and requirements cannot be understated and is a major factor contributing to the success of the project. • The success of the project has been nationally recognised by winning the prestigious "The Chartered Institution of Highways & Transportation" Streets award 2013. These lessons are being applied to other projects, in particular larger and corporate projects such as at Holborn Circus, Aldgate and Bank. The design concept and techniques used will also be particularly helpful where similar elements are being considered.

Appendices

Appendix 1	Cheapside Stage Plan
Appendix 2	General Arrangement
Appendix 3	CIHT Award Summary
Appendix 4	Before and After images
Appendix 5	Lessons learnt

Contact

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