

Project Coversheet

[1] Ownership & Status

UPI: 9672

Core Project Name: St Paul's External Lighting

Programme Affiliation (if applicable): City Lighting Strategy

Project Manager: Clarisse Tavin

Definition of need: The project proposes to replace the ageing external lighting system at St Paul's Cathedral with a new energy efficient system. A recent inspection of the lighting has deemed many of the light fittings and cabling unsafe; many of the fitting have already failed and the system overall is not compliant with current IET (Institute of Engineering and Technology) regulations.

Since 1966, the City Corporation and Cathedral have continued an informal arrangement whereby the responsibility for the maintenance of the external lighting system, the associated maintenance costs and the running costs are the responsibility of the Corporation. The annual costs are in the region of £25k per annum. The specific responsibility sits with the Environment Department.

Replacement with a new energy efficient system will reduce on-going revenue costs by 60% and reduce its carbon emissions by 66%, contributing towards our commitment to net zero by 2040. The new system will be designed to meet the criteria of the City's Lighting Strategy, creating a highly attractive night-time appearance for the Cathedral, which has been absent in recent years. The new lighting system would be both a contributor and a symbol of the City's post-pandemic recovery and, in particular, the recovery of its night-time economy.

A recent inspection of the external lighting system has deemed many of the light fittings and cabling unsafe; many of the lanterns have already failed and the system overall is not compliant with current IET regulations. This is a health and safety risk to users of the Cathedral and to the fabric of this Grade I listed building. The impact of the failure of the external lighting system could result in a catastrophic event. The likelihood of such an event is possible and will increase over time. This risk is being added to the Departmental risk register.

The existing lighting system is not efficient, both in terms of energy consumption and sustainability. Replacement with a new energy efficient system will reduce on-going revenue costs by 60% and reduce its carbon emissions by 66%, contributing towards our commitment to net zero by 2040.

The failure of lanterns and problems associated with current system has resulted in a poorly lit Cathedral exterior, which has a negative impact on the City skyline and night-time economy.

Both the City and Cathedral receive complaints from the public and institutions about the poor state of the external lighting of St Paul's. There is reputational risk to both institutions.

Key measures of success:

- 1) A new lighting system that significantly reduces the health and safety risk associated with system failure, as per the corporate risk assessment process.

- 2) The reduction of costs associated with the maintenance and energy consumption of the lighting system by 60% compared with the existing system – to be borne by St Paul’s Cathedral.
- 3) The reduction of associated carbon emissions of the new lighting systems by 66%, compared with the existing system.

Expected timeframe for the project delivery:

Project programme was dependent on external funding being secured; full project to be delivered before the end of 2026, compared to the previously stated completion by 2024/25.

Key Milestones:

Completion of Trials and Demonstrations: January 2024

Detailed design & consents: March – December 2024

Technical design: January – May 2025

Gateway 5 report: Q2 2025

Start of implementation: Q1 2026

Are we on track for completing the project against the expected timeframe for project delivery? It is expected that the project will be delivered in line with the revised programme.

Has this project generated public or media impact and response which the City of London has needed to manage or is managing? Not to date. However due to its high profile, the project is likely to attract future interest from media/wider public.

[2] Finance and Costed Risk

Headline Financial, Scope and Design Changes:

‘Feasibility Study’ (as approved by Members in May 2008)

‘Capital Bid’ report (as approved by P&R 21/10/10)- (pre-Gateway process)

- Total Estimated Cost (excluding risk): £1,050,000
- Costed Risk Against the Project: N/A
- Estimated Programme Dates: N/A

The City of London is responsible since 1966 for the lighting of St Paul’s Cathedral. The lighting scheme was approaching the end of its 25 years life and was now in need of replacement.

A feasibility study to replace the lighting of St Paul’s Cathedral was undertaken with the Dean and Chapter of St Paul’s Cathedral in May 2008 which identified a preliminary proposal for a future project.

A Capital Bid was approved in 2010 for further evaluation for the external relighting for St Paul’s, at a cost of £50,000 being met from central resources. The implementation of the project was expected to be met from external sources. The evaluation key objectives were:

- Replace the current lighting equipment which is approaching the end of its life;
- Create a flexible lighting scheme that highlights the architecture of the building;

- Deliver annual savings of approximately 50% of running costs (electrical and maintenance);
- Reduce light pollution and energy use in line with the Corporation's commitment to sustainability;
- Improve the quality of the evening environment in this area and therefore, London as a whole;
- Identify an external funding strategy for the implementation of the project.

'Options Appraisal and Design' G3 report (as approved by PSC 16/05/13):

- Total Estimated Cost (excluding risk): range between £425,000 and £1,105,000
- Resources to reach next Gateway (excluding risk) £25k
- Spend to date: £50k
- Costed Risk Against the Project: N/A
- CRP Requested: N/A
- CRP Drawn Down: N/A
- Estimated Programme Dates: these are dependent on securing external funding for the project's implementation.

Following the feasibility study undertaken in May 2008 which identified a preliminary proposal for a future project, several options were evaluated to replace the lighting of St Paul's Cathedral. These include replacing the current scheme like for like or implementing a new design using a range of lighting equipment. The 3 options evaluated are as follows:

- Option 1: Replacing the current scheme like for like;
- Option 2: Implementing a new design using High Intensity Discharge (HID) lighting;
- Option 3: Implementing a new design using Light-Emitting Diodes (LED) technology

The preferred option (Option 3) was approved by Committees and includes the replacement of the current lighting scheme with a new scheme using the latest LED lighting technology. This option will better highlight the buildings architectural features and the new design would continually adapt to the level of lighting needed (i.e., for special events, at different times of the night...). This would deliver considerable energy savings and would reduce maintenance costs, thereby reducing the City's running costs by approx. 60%. It would also deliver considerable sustainability benefits by reducing the City's carbon footprint. This option is also the best in terms of lighting quality.

The Gateway 3 report also requested that a total contribution of £100,000 from the City Finance Committee Contingency Budget be allocated to St Paul's lighting project.

£25,000 of this budget was allocated to evaluate design options, develop a Sponsorship Package, and take the project to the next Gateway.

Following the development of the Sponsorship Package, potential external sponsors were approached, and briefings organised. External funding was secured for part of the project budget.

City Lighting Programme Update (as approved by S&W on 25/02/20 and P&T on 06/03/20)

Update on investigation of sources of funding to deliver St Paul's External Lighting Scheme, through external sponsorship and an application to CIL (Community Infrastructure Levy) Neighbourhood funding.

City Lighting Programme Update (as approved by S&W on 08/07/21, P&T on 20/07/2021 and PHES on 13/07/21)

Officers are continuing to investigate sources of funding to deliver St Paul's External Lighting Scheme, which includes external sponsorship and a potential future application to CIL Neighbourhood funding. Discussion with St Paul's Cathedral about the lighting project and its future maintenance. Total project estimated cost £2.075m.

Gateway 3 Progress report (as approved by RASC on 30/12/2021)

The capital bid of £1.6M was approved.

'Options Appraisal and Design' G3 Issues report (as approved by S&W on 15/02/2022 and Project Sub on 17/02/2022)

This report confirmed a proposed change to the programme to deliver the St Paul's Cathedral external re-lighting project.

'Detailed Options Appraisal' G4 (complex) report (as approved by S&W on 26/09/2023 and PPC on 04/12/2023.

- Total Estimated Cost (excluding risk): £2.075M
- Resources to reach next Gateway (excluding risk): £350,000
- Spend to date: £202,012
- Costed Risk Against the Project: N/A
- Estimated Programme Dates:
 - Lighting Tests – October 2023
 - Lighting Demonstration Trial – January 2024
 - Detailed design – Q1 – Q3 2024
 - Gateway 4c 'Detailed Design' – Q3 2024
 - implementation proposed to start January 2026 (*dependant on securing external funding necessary to implement the project.*)

Scope / Design Change and Impact

The project's programme has been revised to include testing key elements of the design and validate the concept and enable engagement with key stakeholders.

Total anticipated on-going commitment post-delivery [£]:

It is anticipated that the on-going commitments for the upkeep of the new lighting system are borne by the St Paul's Cathedral.

The annual costs are in the region of £25k per annum. The specific responsibility sits with the Environment Department. Replacement with a new energy efficient system will reduce on-going revenue costs by 60%.

The lifetime operational cost (over 25 years) of the existing lighting is estimated at £625,000; the estimated cost of the new lighting system over the same period is £250,000.

Programme Affiliation [£]: