

Post Occupancy Evaluations: How the government can get most out of capital funding programmes

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Post Occupancy Evaluation (POE) is the assessment of how building performance measures up to the expectations of the team that designed and built it. As a major purchaser of buildings, the public sector stands to gain enormously if better information leads to better buildings.

The UK Government has already recognised the value of POE. However, policymakers, end-users and experts warn that the use of POEs is still rare in public sector contracts. Turning this around does not require significant extra investment- we know that carrying out POEs adds less than 0.25% to the cost of a project.

Conducting POEs on all publicly funded building projects would have enormous benefits - both for improving existing buildings and driving innovation in future projects. In order to fully unlock the potential that POEs can provide in driving value-for-money, we believe that a more consistent and transparent approach is needed:

- POEs should be a standard requirement in public sector capital funding programmes.
- Government should define clear objectives for every building project procured and mandate POE on all of their projects to systematise the process, as part of the Government Soft Landings procurement process
- Government should encourage the sharing of POE data between and within departments, and with contractors and designers who deliver capital funding schemes
- Ministers should appoint departmental POE leads and encourage them to work with other departments' POE leads and the Cross-Government Forum for Soft Landings to effectively gather, share, and learn from POEs.

What is Post Occupancy Evaluation?

Post Occupancy Evaluation is the process of obtaining feedback on a building's performance in use after it has been built and occupied. By accurately measuring factors such as building use, energy consumption, maintenance costs and user satisfaction, POE allows for a process of continuous improvement in the construction industry. Some POEs are light touch whereas others are more in-depth, and a wide range of techniques are employed depending upon the focus of particular buildings. Good quality POEs provide a means for assessing whether a project brief had been met, obtain feedback from building occupants, and scope how efficiently a new or refurbished building operates.

POEs are powerful tools for demonstrating whether or not building programmes are delivering best value for money and for identifying areas for improvement.

Architects and other built environment professionals, industry bodies and increasingly clients are pushing forward regular building evaluations via POEs as they can see the benefits better evidence-based decision making offers to their organisational goals. POE is already mandated on all centrally-funded projects under the Government Soft Landings policy¹

POEs help deliver quality, cost-effective buildings

Ensuring that public sector buildings such as hospitals, schools or prisons perform well and represent value for money is becoming ever more important. Government departments are continuously striving to produce more for less while demand for public services is rising.

Measuring performance against desired outcomes is the key to delivering better outputs cost-effectively. However, the lack of connection between the financing, design, construction and operation of buildings means that little evidence is gathered to determine whether publicly-funded buildings are efficient and meet users' needs. For government departments this represents a significant missed opportunity to improve capital funding processes and the quality of buildings the programmes deliver. One of the answers to these challenges could be the greater use of POE to measure building performance and user satisfaction.

Regular building evaluation should be standard in public sector capital funding programmes

POEs add between 0.1% - 0.25% to upfront costs² - outweighed by the benefits that they can provide to building design and management (see examples in box 1). Due to their potential for improving existing publicly procured buildings and for innovating successive projects, the RIBA believes regular building evaluation via POEs should be the standard in public sector capital funding programmes.

¹ Cabinet Office, [Government Soft Landings Policy 2012](#)

² This figure includes the cost of post-occupancy surveys as well as the extra time required to address any identified issues in the post-handover stage ([Building, 17 June 2011](#)).

Box 1. Benefits of POEs

Enabling best practice to be developed in a particular building typology: Wilkinson Primary School, Wolverhampton

A ten-year programme of POE research undertaken on ten successively built schools in the Wolverhampton area has led to improvements in the design, construction, and management of each successive school building. The latest, Wilkinson Primary, uses almost 70% less energy to heat spaces and provide hot water compared to the first school built in the area. Refined building designs and construction processes have significantly reduced running costs and made the building far easier to run from an operational perspective. The improvements have benefitted school staff and pupils, who have rated the building as providing high levels of satisfaction and comfort at all times of year.

Demonstrating public investment was well-spent: Maggie's Nottingham

Carrying out a POE on Maggie's Nottingham enabled the social impacts of the building as experienced by its users to be captured and expressed as a monetary value. The total impact of the design of the centre for the building users was found to be £134,800 per year projected to £3,572,800 over the 60 year lifetime of the building using HM Treasury discounting rates. These significant benefits – mainly accrued as a result of improved staff wellbeing and productivity rates - far outweigh the building's original cost of £1.45 million. Access to such information ensures that the 'true' value of public investment is fully captured.

Using POEs to tweak the management of space and educate users to maximise a buildings' performance: New Art Exchange, Nottingham

A series of POEs were carried out on the New Art Exchange, a cultural centre in Nottingham to understand how the building was performing from the perspective of its users. The POEs helped to identify actions needed to resolve issues raised – such as the need for more user-friendly instruction manuals and a longer handover period to resolve building services and management issues. The gallery staff had not been informed that heavy duty plasterboards had been installed specifically to accommodate heavy exhibits – through the POE process the full capacity of the gallery can now be used. Issues with overheating in summer were also resolved through educating staff on the best use of windows to ensure sufficient ventilation, in particular for night time cooling. The resulting changes have led to better space management and user satisfaction.

Greater support from Ministers is required for systematic POE implementation

It is encouraging that some Government departments are already embracing POEs, mainly driven by the Government Soft Landings policy (2016) aimed at improving the value offered by public sector construction. However, despite this outwardly positive sign, government departments with capital funding responsibilities face a number of outstanding issues which need to be addressed in order to fully capture the benefits of POE.

These barriers are not monetary- capital funding departments agree that extra resources would do little to alleviate effective gathering, sharing, and learning from POEs. Rather, the extra help needed relates to Government commitment to prioritise POE take up within their department procurement programmes.

This includes encouraging civil servants to define clear objectives for every building project they procure as well as to mandate POEs on all of these projects. By setting out clear objectives at the start of projects and later carrying out an assessment of the final products, operational performance can be optimised as soon as possible to enable running and maintenance budgets to stretch further. User satisfaction can be boosted and lessons learned fed into successive projects.

It is vital that Ministers of capital funding departments enable civil servants to share the POE data they collect – among themselves, but crucially also with the contractors and designers who deliver capital-funded schemes. Commercial sensitivity and reputational risks are valid considerations against data disclosure; but there are methods in which building performance information can be shared and displayed without compromising these, such as benchmarking. Data transparency would enable all parties to continuously improve, making the drive for public sector efficiency and outcome improvement a collective effort.

Using POEs to create a dataset that underpins the design decisions within government buildings could place them at the forefront of design. These findings will help to inform construction of other UK buildings, improving the UK construction industry and ensuring that the UK remains a market leader in building design and construction,.

Finally, Ministerial support is required to secure adequate advice for their departments on establishing frameworks for systematically carrying out and learning from POEs. Appointing a POE champion to coordinate POE data gathering, sharing, and learning across the department would be a valuable first step.

POE champions from across capital funding government departments should seek to exchange best practice between each other, and work alongside the Cross-Government Forum for Government Soft Landings. Government Soft Landings is an active policy within the Cabinet Office aimed at improving the value offered by public sector construction in terms of building performance and the requirements of those that use them. The Cross-Government Forum for Soft Landings can provide valuable guidance and best practice case studies on effective POE framework implementation.