



INSIGHT

# Lessons learned: Delivering value from government investment in major projects

Cross-government

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National Audit Office

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## **Report by the Comptroller and Auditor General**

Ordered by the House of Commons  
to be printed on 23 February 2024

This report has been prepared under Section 6 of the  
National Audit Act 1983 for presentation to the House  
of Commons in accordance with Section 9 of the Act

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**Comptroller and Auditor General**  
**National Audit Office**

**16 February 2024**

# Introduction

**1** Government invests substantial resources – money, time and effort – in major projects. As at March 2023, the Government Major Projects Portfolio, government’s register of its costliest and riskiest programmes, included 244 projects with an estimated total whole-life cost of £805 billion. Government undertakes projects, whether infrastructure or service transformation, to deliver a range of government objectives. These objectives include supporting economic growth, meeting climate change obligations or making public services more efficient.

**2** Government produces guidance for departments on how to establish, capture and evaluate the value they are trying to achieve.<sup>1</sup> However, our work on *Projects leaving the Government Major Projects Portfolio*<sup>2</sup> and *Evaluating government spending*<sup>3</sup> found that government does not routinely look at what happens after major projects are completed. We spoke to people with project management expertise from within and outside government. They expressed the view that government focuses more on identifying potential benefits to make the case for investment, and on delivering to budget and schedule, than on ensuring that projects achieve the intended purpose and long-term value. Delivering to budget and schedule are important components of whether project delivery is value for money. However, the success of a project and whether it represents value for money will ultimately be determined by whether the value of the project justifies its cost.

**3** For this report, we examined how projects achieve value, including after they are completed, to see what lessons there are for other projects. By value, we mean the difference projects make to citizens, service users or the environment. Similar concepts, such as benefits, outcomes or impact, are often used interchangeably when discussing what a project has achieved. We use the term value to reflect that projects may add value for stakeholders and the public beyond the benefits identified in their business cases. Value is generated by how organisations or stakeholders adopt and make use of project outputs in practice. Occasionally we use other terms where appropriate.

1 The Infrastructure and Projects Authority (IPA), *Guide for Effective Benefits Management in Major Projects*, October 2017. HM Treasury guidance includes the Green Book on options appraisal and business case development, the Magenta Book on evaluation, and the Aqua Book on quality analysis. IPA is currently refreshing its benefits guidance and is planning to publish in 2024 the Teal Book on project delivery guidance, which will cover value/benefits.

2 Comptroller and Auditor General, *Projects leaving the Government Major Projects Portfolio*, Session 2017–2019, HC 1620, National Audit Office, October 2018.

3 Comptroller and Auditor General, *Evaluating government spending*, Session 2021–22, HC 860, National Audit Office, December 2021.

## About this report

**4** We returned to six projects that received public funding;<sup>4</sup> are complete or have been operational for some time; and on which we have reported during earlier phases of their lifecycle (see Appendix One). Government bodies delivered five of the projects. The other is a project by the BBC, which receives public funding but is not a government body and is operationally independent. We interviewed a selection of people who were involved in the projects or are operating the completed projects, and other stakeholders. We used open questions to explore their reflections on the value the projects achieved and how that happened. We focused on the positive factors, and what seemed to work, predominantly post-delivery. We also reviewed published evaluations where available.

**5** The case example projects that we looked at were as follows:

- **The Millennium Dome/The O2** (completed 1999) involved constructing a venue on the Greenwich Peninsula to host the Millennium Experience, an exhibition that was open for the whole of 2000. In 2002, the government agreed a deal to sell the Dome to the Anschutz Entertainment Group (AEG), which now operates the Dome as The O2 Arena (The O2), an entertainment and sporting venue with retail and hospitality venues on the site.
- **Diamond Light Source** (opened 2007) is the UK's national synchrotron science facility located at the Harwell Science and Innovation Campus in Oxfordshire. Funded by UK Research and Innovation (UKRI) – an arm's length body of the Department for Science, Innovation & Technology – and the Wellcome Trust, it provides national science infrastructure, and works like a giant microscope. It is available to researchers, with various academic and industrial uses.
- **High Speed 1** (completed 2007), also called the Channel Tunnel Rail Link, provides high speed rail access from London to Kent and continental Europe. It is managed by HS1 Ltd.
- **The BBC's move to Salford** (completed 2012) involved the move of several of the BBC's operational and production facilities from London to a new site in Salford, Greater Manchester.
- **The London 2012 Olympic and Paralympic Games** (completed 2012) involved developing the Olympic Park (now the Queen Elizabeth Olympic Park), venues and infrastructure required for the Games and their legacy.
- **The Hartree Centre** (opened 2013), funded by UKRI and located at the Sci-Tech Daresbury Campus in Cheshire, is dedicated to industrial application and research, helping UK businesses and organisations with adopting supercomputing, data science and artificial intelligence technology solutions.

<sup>4</sup> The projects in this report will have begun, and in some cases completed, under different assurance regimes and with different guidance on value and benefits in place. For example, the Major Projects Authority assured government major projects from 2011 and Infrastructure UK provided commercial support from 2010, until they merged in 2016 to become the Infrastructure and Projects Authority.

**6** We have not sought to carry out our own evaluations or make judgements about whether the projects have delivered the value that was expected or promised, or were value for money. Given each project was a large and complex undertaking, our observations are not exhaustive, and do not cover all aspects of project delivery and operation.

**7** We drew out six main observations (paragraphs 10 to 33) from our examination of the case examples.

- In order to demonstrate value, projects need to be properly evaluated.
- Major projects can act as a catalyst for growth.
- A clear vision, objectives and leadership culture focused on the intended value of the project are key.
- Many organisations and stakeholders need to work in partnership, creating a shared vision, through delivery and beyond.
- It can take time and additional investment to realise value from major projects.
- The potential value from a project can go beyond the value that was originally intended or expected.

**8** We combined our case examples with analysis of previous National Audit Office (NAO) work on major projects to develop seven practical lessons which government might consider as it looks to generate greater value from its major projects (Figure 1). We group the lessons around three themes.

- Start with the difference you want to make and the value you want to produce, rather than the project you want to do.
- Fully consider the wants, needs and concerns of stakeholders (those who will use, operate or benefit from the project) from design through to business as usual, and balance this against your strategic objectives.
- Once the asset or transformed service is complete, regularly review the contribution it makes to your strategic objectives and be willing to adapt if it would deliver more value.

**9** We tested the lessons with panels of government officials and project delivery professionals. More information on our approach is in Appendix Two.