

# The Megaproject Paradigm: Does Cost Growth reflect “Good” Management?

*11 Fórum Estratégico PTPC Cluster AEC. Uma década de Megaprojectos. Do desafio à Concretizaçãp, com Sustentabilidade*

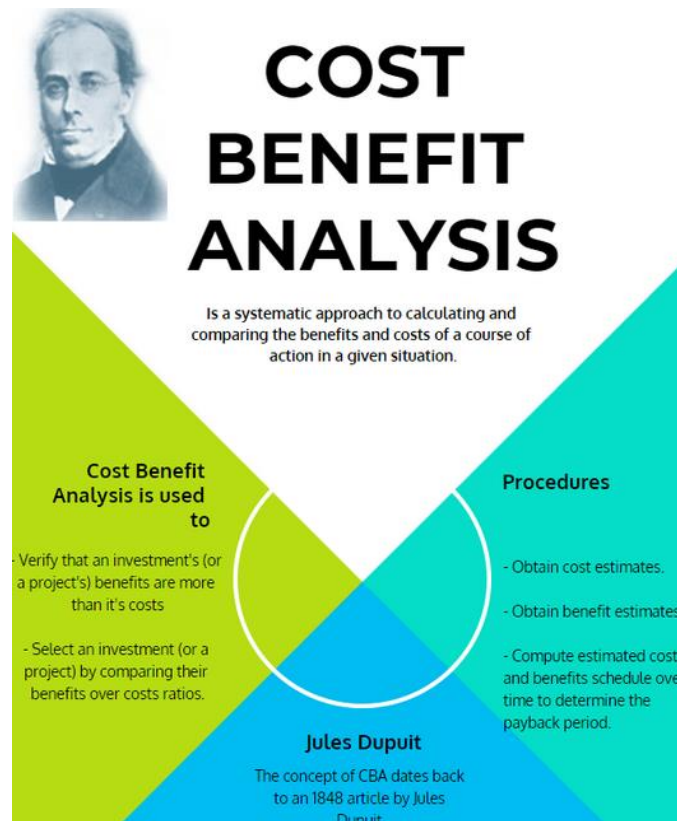
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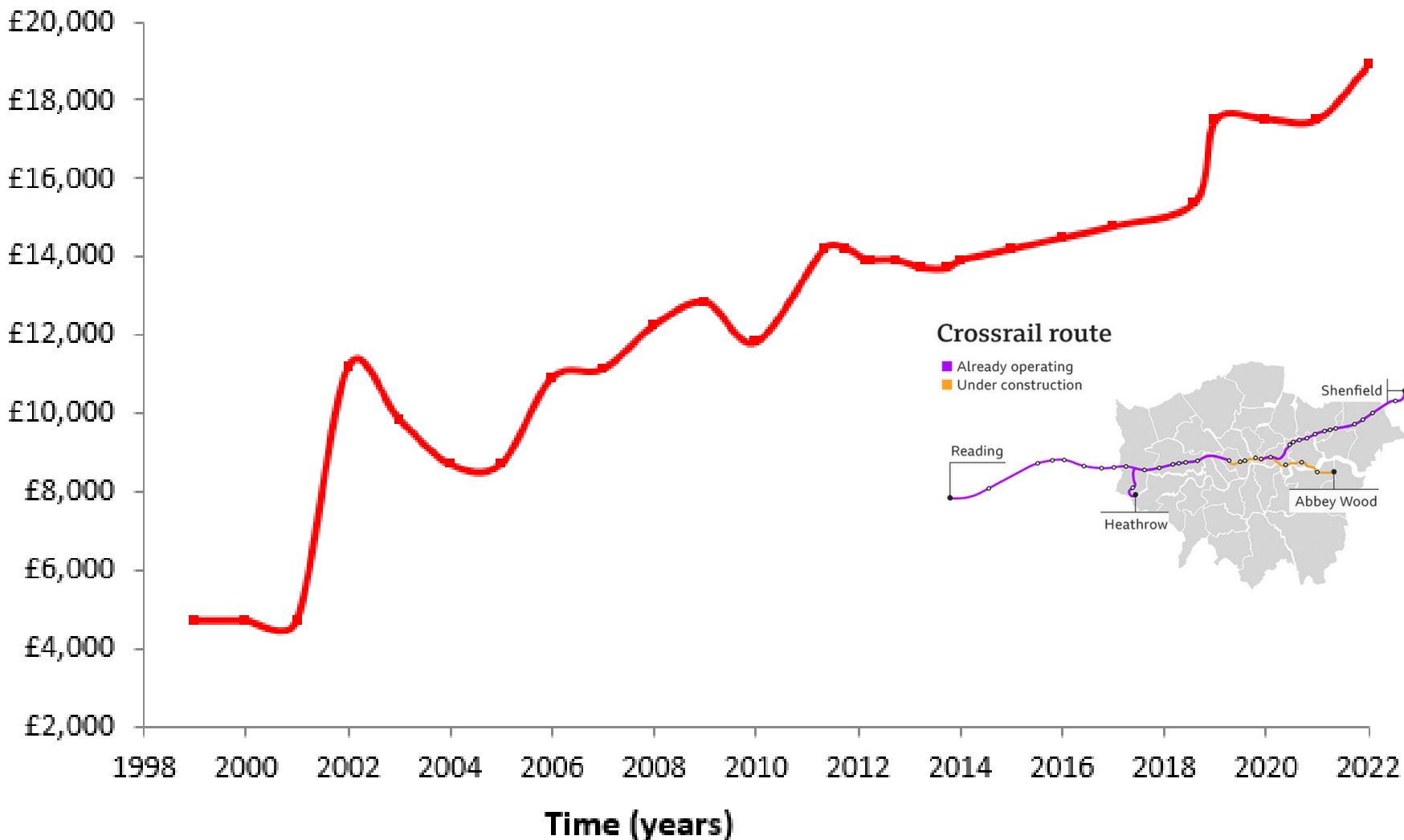
# Root Cause of Cost Overruns

We approve what we can define, count,  
and observe



# But we Build what Society (“us all”) Permits

Cost forecast (cash prices, millions)



# Unsustainable Status Quo

Today, ~20% of project costs go into indirect costs...and cost (forecast) continues to grow and grow and grow

## Iron triangle – a 1950s paradigm

A project is an organization unit dedicated to the attainment of a goal — generally the successful completion of a developmental product on time, within budget, and in conformance with predetermined performance specifications.

*Harvard Business Review (May-June 1959)*



The DCA is the IPA's evaluation of a project's likelihood of achieving its aims and objectives, and doing so on time and on budget.

- **Green** Successful delivery of the project on time, budget and quality appears highly likely and there are no major outstanding issues that at this stage appear to threaten delivery significantly.
- **Amber/Green\*** Successful delivery appears probable; however, constant attention will be needed to ensure risks do not materialise into major issues threatening delivery.
- **Amber** Successful delivery appears feasible but significant issues already exist, requiring management attention. These appear resolvable at this stage and, if addressed promptly, should not present a cost/schedule overrun.
- **Amber/Red\*** Successful delivery of the project is in doubt, with major risks or issues apparent in a number of key areas. Urgent action is needed to address these problems and/or assess whether resolution is feasible.
- **Red** Successful delivery of the project appears to be unachievable. There are major issues with project definition, schedule, budget, quality and/or benefits delivery, which at this stage do not appear to be manageable or resolvable. The project may need re-scoping and/or its overall viability reassessed.
- **Reset** A significant change to a project's baseline which involves a business case refresh or change.
- **Exempt** Data can be exempt from publication under exceptional circumstances and in accordance with Freedom of Information requirements, i.e national security.

Infrastructure and Projects Authority

Annual Report on Major Projects 2021-22



Reporting to Cabinet Office and HM Treasury

Annual Report											Project Name	Dept
2013	2014	2015	2016	2017	2018	2019	2020	2021	2022			
										A417 Air Balloon	DFT	
										A428 Black Cat to Caxton Gibbet	DFT	
										A66 Northern Trans-Pennine	DFT	
										Crossrail Programme	DFT	

# Purpose of megaprojects increasingly defined by today's deepest challenges:

The purpose of the planning system is to contribute to the achievement of sustainable development. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs<sup>4</sup>. At a similarly high level, members of the United Nations – including the United Kingdom – have agreed to pursue the 17 Global Goals for Sustainable Development in the period to 2030. These address social progress, economic well-being and environmental protection<sup>5</sup>.



Ministry of Housing,  
Communities &  
Local Government

So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11).

all plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects;

National Planning Policy Framework

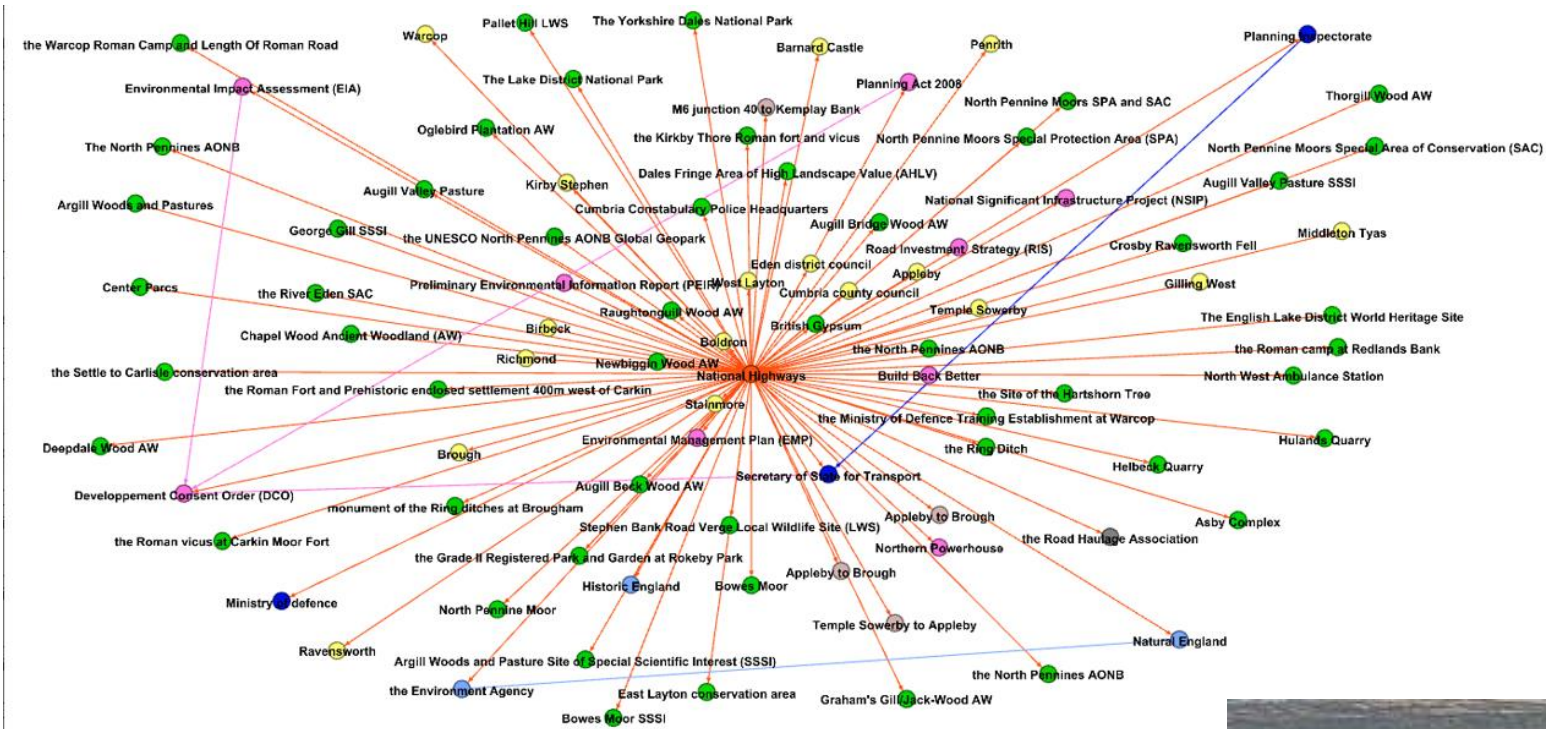
Society demands Socially Valuable Outcomes

# Value co-production: A new paradigm



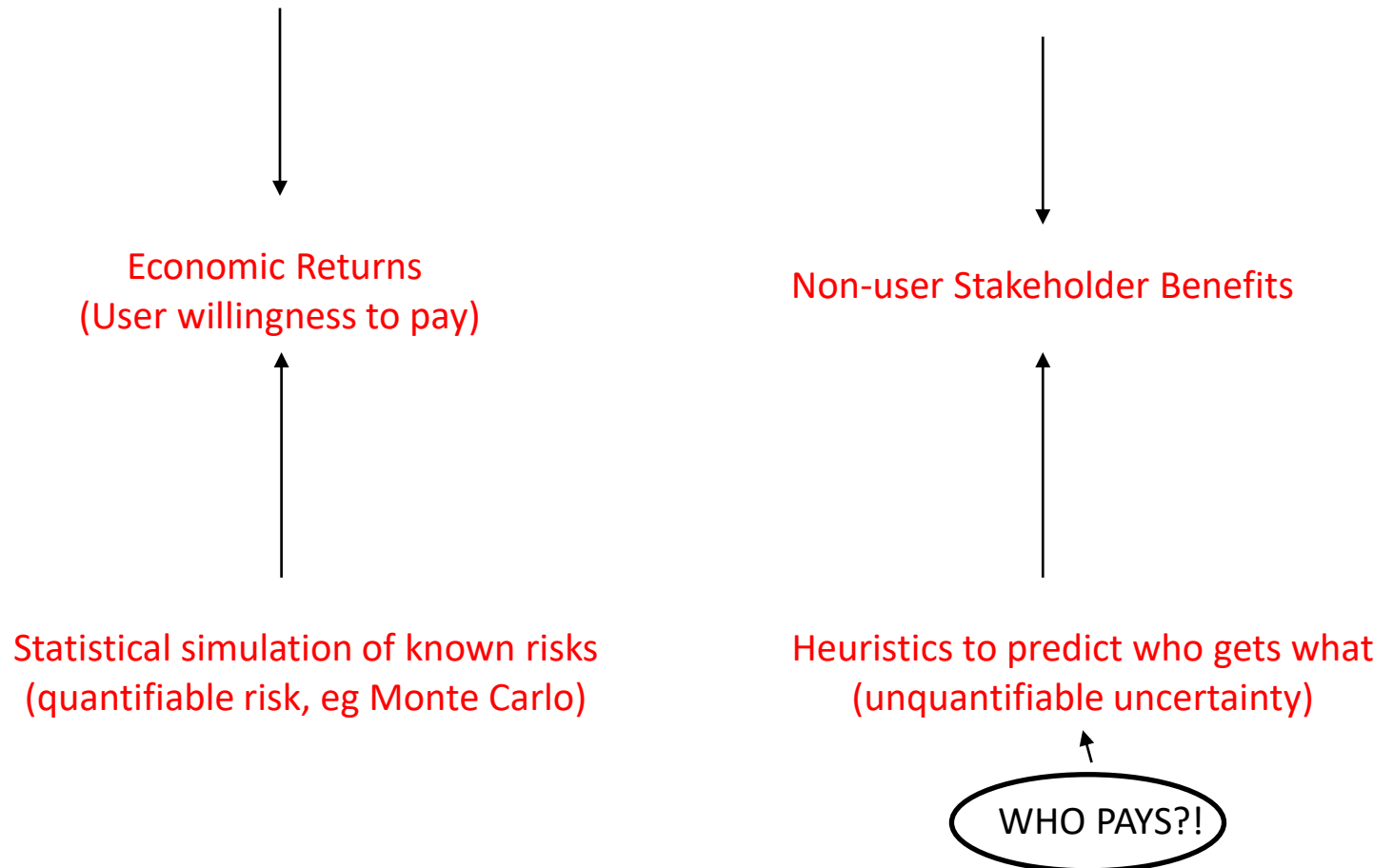


# Can we link cost growth to value co-production and distribution?



# Rethinking megaproject budgeting

Project Budget = Cost Forecast + Value Distribution Allowance





# First Principles

**Megaprojects cannot progress** unless essential stakeholders are encouraged to cooperate

Stakeholders will not cooperate unless the purpose of a megaproject widens beyond maximizing economic returns towards producing a **socially valuable outcome**

# A World in Change

**We need more data** to make breakthroughs in our understanding of megaproject behaviour and performance

Fundamental canonical questions:

*Who gets what?*

*Who pays what?*

*Who is “in” and who is “out”?*