

New thinking in appraisal and evaluation

4th October 2022



What's new in government evaluation

The Evaluation Task Force

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The use of evidence in UK policy making is nothing new...

Evidenced-based policy making

What Works

"Thoroughly evaluating the impacts of all policies"







...but we still have a long way to go

Only 8% of £432 billion Government Major Projects had plans for robust impact evaluation in palace

Prime Minister's Implementation Unit, 2019

"...government cannot have confidence its spending in many policy areas is making a difference"

National Audit Office, 2021



The Evaluation Task Force is trying to change this

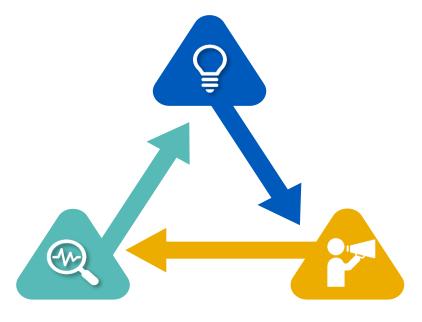
To put robust evaluation evidence at the heart of government decisions



... so HM Government can have confidence the money it spends is delivering better outcomes for the public, and delivers value for money.

How will we achieve change?

Embedding evaluation into decision-making processes

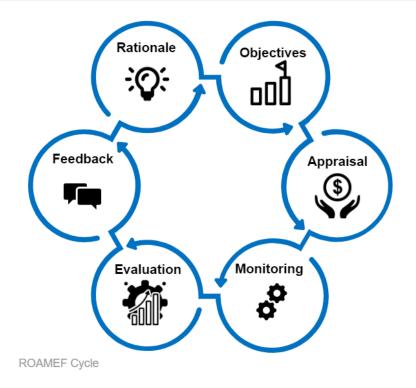


Supporting the delivery of priority evaluations

Promoting the importance of evaluation across HM Government

What do we want to see?

1. Useful evaluation – embedded in the policy cycle

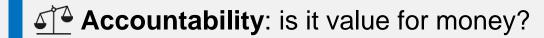


Evaluation should be used before, during and after implementation

- ✓ Designing policies with good evidence
- Building evaluation into implementation
- ✓ Sharing learnings afterwards

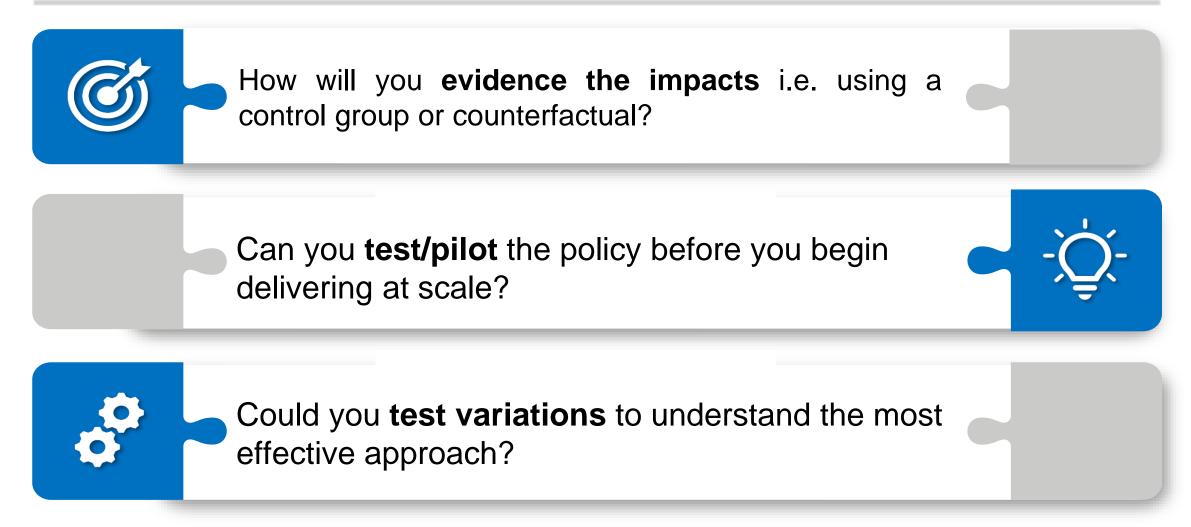


\Q: Learning: what works? what doesn't?



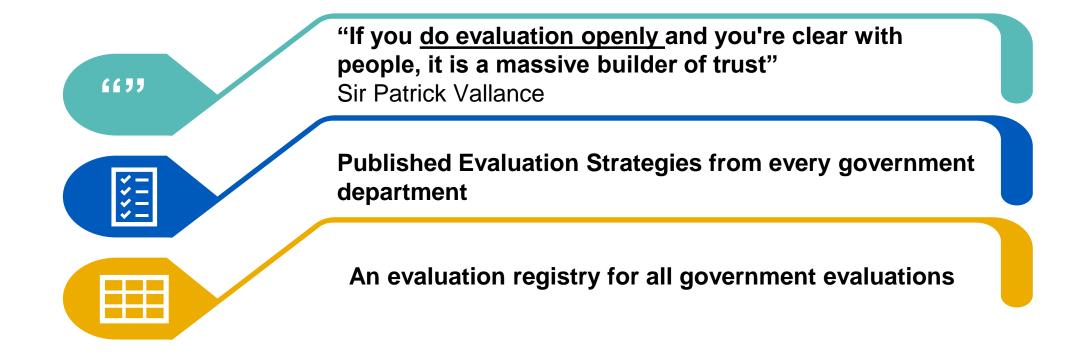
What do we want to see?

2. Robust evaluation – built into implementation



What do we want to see?

3. Transparent evaluation – maximising what is learned





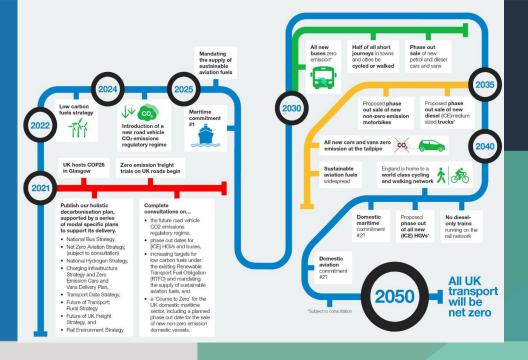


Get in touch for further information!

www.gov.uk/government/organisations/evaluation-task-force

etf@cabinetoffice.gov.uk





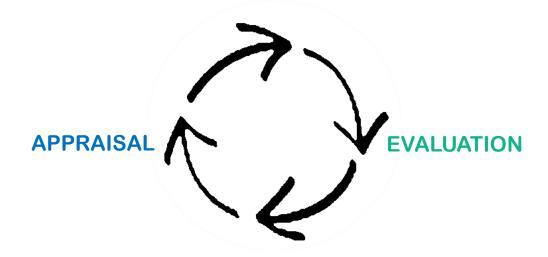
From appraisal to evaluation and back: Squaring the circle in DfT

Dr Florentina Taylor

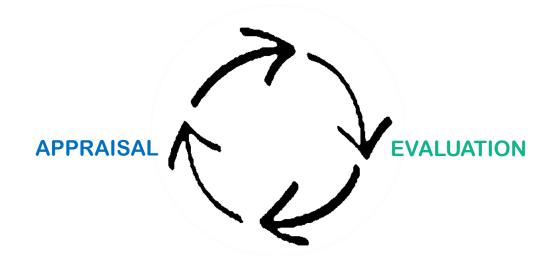
Head of Evaluation Development, Evaluation Centre of Excellence, Department for Transport

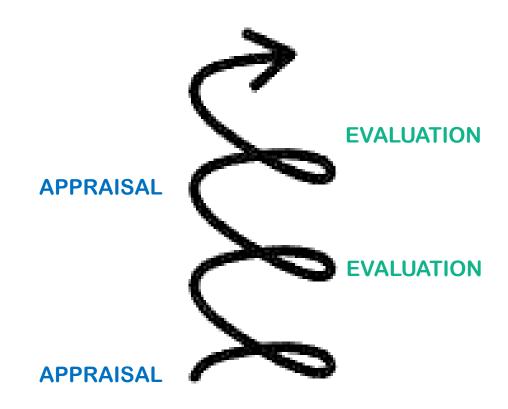
4 October 2022

Appraisal and evaluation in public policy Theory vs practice



Appraisal and evaluation in public policy Theory vs practice





Why?

Typically:

- Different teams
- Completed years apart
- Evaluation planned too late ('add-on')

DfT solutions

- 1. Evaluation training for all analysts
- 2. 'Policy School' with significant evaluation component
- 3. Transport Analysis Guidance: Evaluation unit

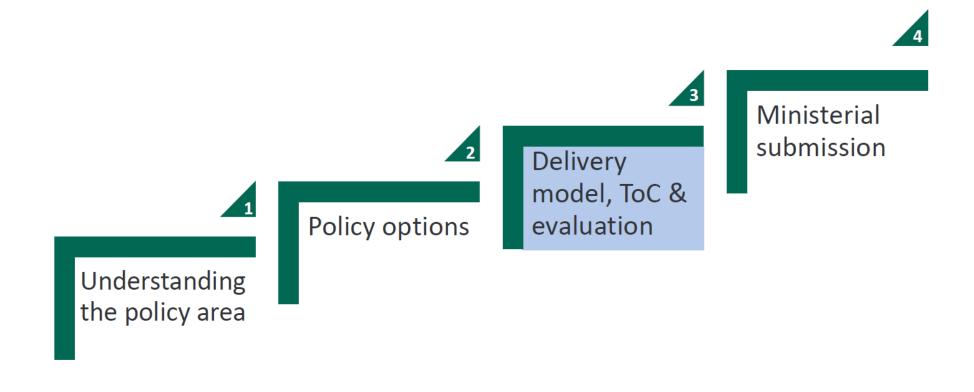
Evaluation training for all DfT analysts

Nine-week course:

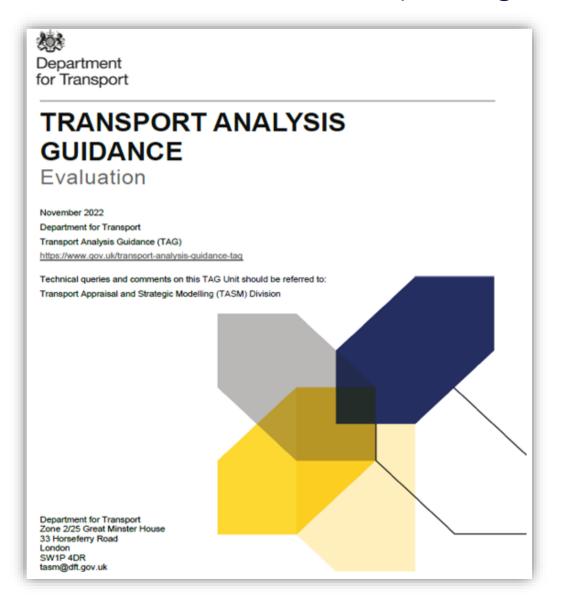
- 1. Introduction to evaluation
- 2. Scoping an evaluation
- 3. Theory of change and evaluation frameworks
- 4. Impact evaluation (I)
- 5. Impact evaluation (II)
- 6. Process evaluation
- 7. Spatial econometric analysis
- 8. Linking appraisal and evaluation
- 9. Specifying, commissioning and managing an evaluation

Full-cycle policy development course

Three-day 'Policy School':



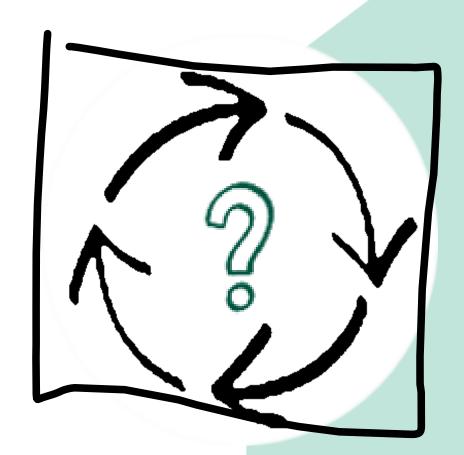
New TAG Evaluation unit (www.gov.uk)



New TAG Evaluation unit (www.gov.uk)

To be published in Nov 2022

- 1. The role of monitoring and evaluation
- 2. Evaluation planning
- 3. Understanding the intervention
- 4. Evaluation design
- 5. The counterfactual
- 6. Measures of evaluation quality
- 7. Data requirements
- 8. Reporting and dissemination
- 9. Further resources



Frontier Economics - New thinking in appraisal and evaluation

Introduction to the Culture and Heritage Capital (CHC)
Framework

Harman Sagger - Head Economist for Arts, Heritage and Tourism Department for Digital, Culture, Media and Sport















- Develop a formal approach to valuing the cost and benefits of culture and heritage to society. Using a systems based approach similar to the successful Natural Capital Approach
- Built on the foundations of HMT's Green and Magenta Books
- Develop a multidisciplinary approach combining:
 Economics; Heritage Science; and Arts and Humanities.
- Inform decisions of other sectors e.g. cross-cutting government programmes like LUF or transport projects.

Why do we need a Culture and Heritage Capital Approach?

- There is currently no consistent approach to measure the benefits of culture and heritage to society.
- Without a consistent approach, our sectors are undervalued.
- Furthermore, we are unable to fully measure the VfM in appraisals and evaluations.
- Sector specific guidance is already available for other sectors so it is critical we are on a level-playing field.



The Culture and Heritage Capital Framework



Department for Digital, Culture Media & Sport

Valuing Culture and Heritage Capital: A framework towards informing decision making

Harman Sagger

Jack Philips

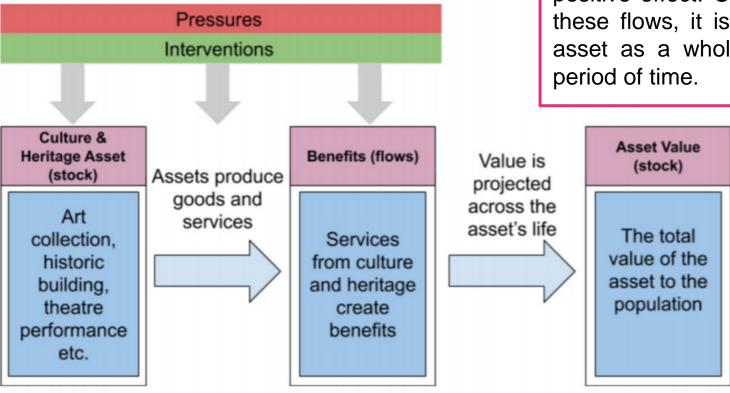
Mohammed Haque

January 2021

- The first iteration was published in January 2021
- Sets out the ambitions and approach of the programme

The Framework Model

The published framework set out high level concepts.



Cultural and heritage assets can be thought of as the "stock", while the services that create benefits to society are regarded as "flows". Background pressures such as environmental damage or unsustainable use can negatively affect the services provided by an asset and the demand for those services. Effective management interventions/policies and additional inputs can have a positive effect. Once monetary values are estimated for these flows, it is possible to estimate the value of the asset as a whole by forecasting these values over a period of time.

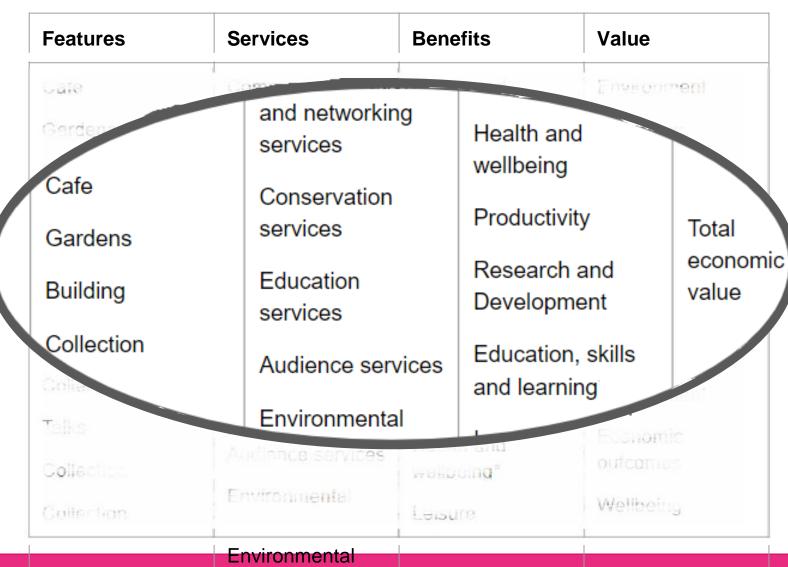
By defining these stocks and flows we can better understand what we need to value and measure consistently across the sectors.

For example, for museums we will need to define the typology of services, stocks and flows

Asset (example)

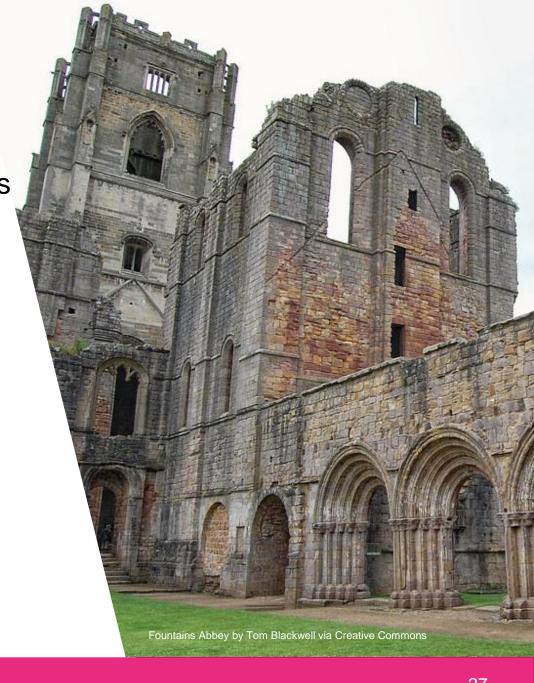


Building a consistent definition of services benefits and costs



Using economic valuation techniques to value benefits

- The Culture and Heritage Capital Programme aims to quantify these wider benefits
- Enables comparison in monetary terms and understanding of value for money
- Commonly used economic valuation techniques:
 - Contingent valuation
 - Choice modelling
 - Hedonic pricing
 - Travel cost
 - Wellbeing valuation



Discrete Choice Modelling Research

- DCMS CHC Programme has provided a range of point estimates on use and non-use values.
 However, on their own these can't be used for marginal analysis.
- DCMS commissioned lpsos to:
 - 1. Explore the use of **discrete choice modelling** (DCM) to estimate **marginal changes to use** and non-use value to inform VfM analysis.
 - 2. If DCM could be combined with central bank of use and non-values for specific assets types; and
 - 3. If (1) and (2) could offer a **cheaper alternative** to organisations undertaking expensive one-off bespoke contingent valuation studies.
- Early results are encouraging, analysis shows that public were able to rank and score around 8
 attributes of the new offer at the National Railway Museum and this could be combined with an
 existing use values.
- However, there are still issues around the inclusion of non-use values.

Evaluating museum maintenance

(A7) Installation and

upgrade of digital

infrastructure

Short-term Mid-term Outputs Outcomes (premise for intervention) Outcomes Outcomes (impact) (O8) New (A8) Improving accessibility visitor access to measures (e.g. buildings so that Changing places there is inclusive 1. Museums and their toilets / wheel chair access for everyone collections are a ramps /lifts) PBIF (I1) public good (15 museum (A1) Urgent repair (O1) (SO1) Re-open lost Museum buildings spaces and reduce and overhaul of the Repaired/overhauled ALBs and (LO2) Museums require regular and building structure roofs, high-level the need for areas selected continue to support ongoing maintenand envelope masonry, windows, of museums to be local communities DCMS-affiliance and repair rainwater goods closed off to the (MO1) National and civic and placemaking, ated orgs) public (including (A2) Installation of museums develop more 3. Museums are facing attracting tourism widening access to £60m capital appropriate fire sustainable financial and and other a significant repair disabled visitors) (O2) Detection and business models (lower investment in detection and risk commercial activity and maintenance mitigation mitigation measures operating costs and (e.g. placemaking, 2020/21 backlog and increase income) creative industries measures (e.g. installed £300m markets are unlikely intruder alarms etc.) allocated for to provide the (SO2) Halt the 22/23 to (A3) Provision of socially optimum ongoing material (O3) New permanent 24/25 permanent access failure and level of investment inspection to facilitate (MO2) Museums' internal degradation of (LO1) National and (market failure) platforms/access maintenance and museum buildings accredited environments are inspection 4. Deterioration is not (and collections) optimised for collection museums and their collections are only continuing but conservation (RH and (O4) New or (A4) Develop and safeguarded for upgraded building Temp °C) increasing ever implement realistic future generations maintenance plan more quickly as (SO3) Lower the risk maintenance plans issues exacerbate of catastrophic MEND (12) (O5) Upgraded each other events (incl. fire, heating, wiring, (Accredited (A5) Building flood, structural 5. The maintenance HVAC, building non-national services upgrades failure) (MO3) Museums transition control systems and repair backlog (LO3) museum and replacement Museums) from reactive to institutions continue represent signif-(O6) New LED preventative repair and • £18.8m in to support the icant threats to lighting systems, maintenance nation's 'soft power' grants (A6) Capital works museums' ability to retrofitted (SO4) Improve and influence at an awarded to increase the fulfil their fundainsulation/thermal museum buildings' international level (2022)environmental mental functions and performance environmental • £63.4m sustainability of the measures performance and risks to life, cultural museum allocated for energy efficiency heritage and 22/23 to (O7) New or financial viability 24/25 upgraded digital

infrastructure (e.g.

smart meters /

monitoring sensors)

PBIF and MEND evaluation framework report

Evaluating museum maintenance

(premise for intervention) Museums and their collections are a public good Museum buildings require regular and ongoing maintenance and repair 3. Museums are facing a significant repair and maintenance backlog and markets are unlikely to provide the socially optimum level of investment

(market failure) 4. Deterioration is not only continuing but increasing ever more quickly as issues exacerbate each other

5. The maintenance and repair backlog represent significant threats to museums' ability to fulfil their fundamental functions and risks to life, cultural heritage and financial viability

PBIF (I1)

(15 museum

ALBs and

DCMS-affili-

· £60m capital

investment in

allocated for

ated orgs)

2020/21

22/23 to

MEND (12)

(Accredited

non-national

Museums)

• £18.8m in

awarded

grants

(2022)

£63.4m

22/23 to

24/25

allocated for

24/25

£300m

selected

Outputs

(O8) New accessibility measures (e.g. ramps /lifts)

(A1) Urgent repair and overhaul of the building structure and envelope

(A8) Improving

visitor access to

buildings so that

there is inclusive

access for everyone

(A2) Installation of appropriate fire detection and risk mitigation measures (e.g. intruder alarms etc.)

(A3) Provision of permanent access to facilitate maintenance and inspection

(A4) Develop and implement realistic maintenance plans

(A5) Building services upgrades and replacement

(A6) Capital works to increase the environmental sustainability of the museum

(A7) Installation and upgrade of digital infrastructure

Changing places toilets / wheel chair

(01)Repaired/overhauled roofs, high-level masonry, windows, rainwater goods

(O2) Detection and mitigation measures installed

(O3) New permanent inspection platforms/access

(O4) New or upgraded building maintenance plan

(O5) Upgraded heating, wirin HVAC, building control systems

(O6) New LED lighting systems, retrofitted insulation/thermal performance measures

(O7) New or upgraded digital infrastructure (e.g. smart meters / monitoring sensors) (SO1) Re-open lost spaces and reduce the need for areas of museums to be closed off to the public (including widening access to disabled visitors)

(SO2) Halt the ongoing material failure and degradation of museum buildings (and collections)

(SO3) Lower the risk of catastrophic events (incl. fire, flood, structural failure)

(SO4) Improve museum buildings' environmental performance and energy efficiency

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Long-term Outcomes (impact)

continue to support local communities and placemaking, attracting tourism and other commercial activity (e.g. placemaking, creative industries etc.)

(LO2) Museums

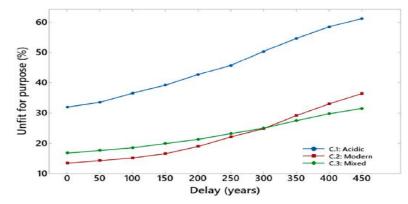
(LO1) National and accredited museums and their collections are safeguarded for future generations

(LO3) museum institutions continue to support the nation's 'soft power and influence at an international level

Valuing change to buildings and collections?

- Assets are subject to change that can cause irrecoverable loss, so it
 is essential to fully assess the costs and benefits of any damage or
 degradation to assets.
- The concept of irrecoverable loss can be examined through the lens
 of Heritage and Building Science and potentially combined with
 economic valuation techniques

Damage Functions for paper collections



Source: Duran-Casablancas C., Strlič M., Beentjes G., de Bruin G., van der Burg J., & Grau-Bové J. (2021) A Comparison of Preservation Management Strategies for Paper Collections, Studies in Conservation



How do we value changes to building and collections?

- Damage functions could be combined with economic valuation such as use and non-use value to estimate irrecoverable loss (welfare loss).
- The welfare value of preventing damage to assets can be estimated by the value of the irrecoverable loss that can be prevented.

$$W_c = N (r^w - r^c)$$

Where:

W_c = Total welfare gain from avoiding irrecoverable loss.

 N_U = Use and non-use value of assets (other values, e.g. GVA, would be needed to be added to fully account for the full public welfare)

 r^w = rate of irrecoverable loss without an intervention (damage function)

 r^c = rate of irrecoverable loss with an intervention (damage function)

Areas for further research

- Welfare weighting
- Discount rates and asset life
- Application of non-use value
- Biases in economic valuation methodologies
- Use of more sophisticated data techniques to reveal public value





Value for Money in Theory-Based Evaluation

New thinking in appraisal and evaluation

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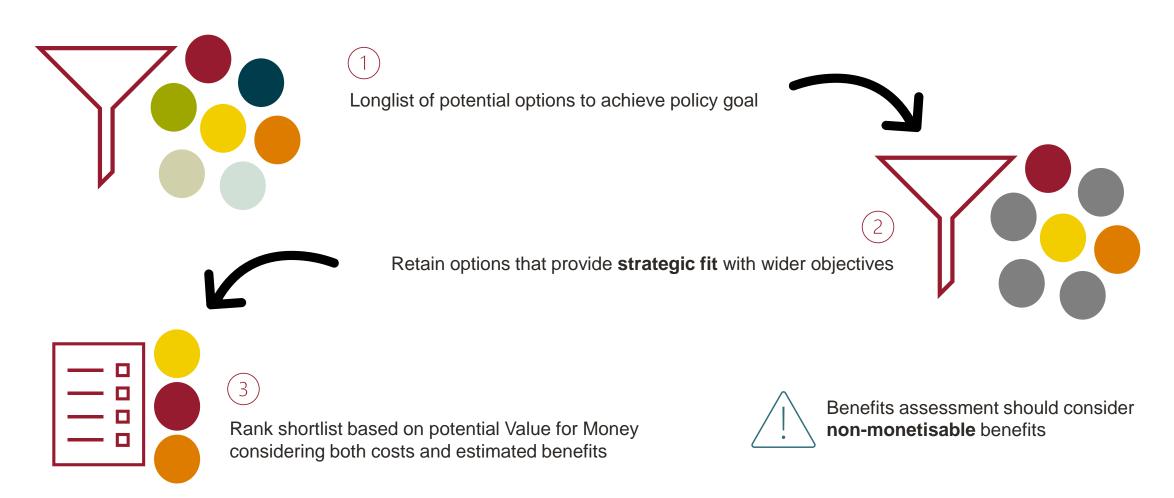
Value for Money is an important tool for the accountability of public spending, focusing on the relationship between the costs and benefits of an intervention



Value for Money is a judgment about the optimal use of public resources to achieve stated objectives ... based on consideration of present value to society of all social, economic and environmental benefits and present public resource costs.

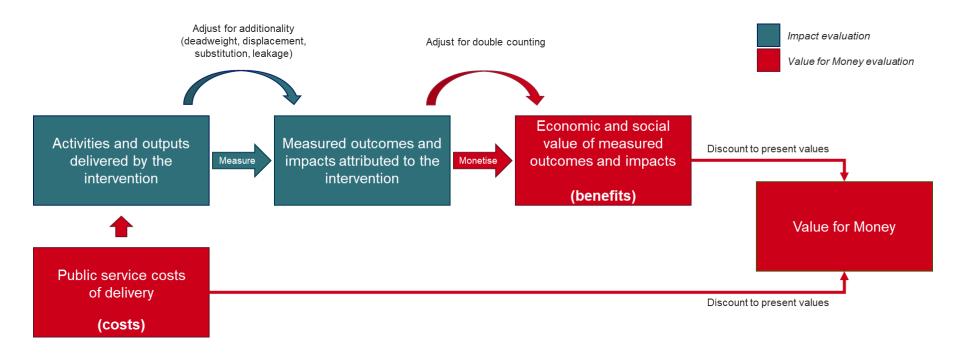
Adapted from Green Book p.52

In appraisal, VfM is an important tool to guide decision-making between alternative approaches to achieving policy goals



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In evaluation, we need to demonstrate that VfM has been realised based on evidence – do the social benefits outweigh the policy costs?





While impact evaluation demonstrates and quantifies outcomes, it cannot on its own assess whether those outcomes are justified. Value-for-money evaluation considers such issues, including whether the benefits of the policy are outweighed by the costs, and whether the intervention remains the most effective use of resources.

Magenta Book, p.15

There is growing use of **theory-based** evaluation methods, but this poses challenges for a Value for Money evaluation

Landscape for evaluation



- Complex environment
- Multiple objectives
- Long-term investments



Intangible benefits



VfM evaluation may only cover a small part of an intervention in terms of monetised benefit



No objective control group



 Limits robust counterfactual analysis for evaluation



Lack of clear attribution



Hard to size/scale the benefits as part of a VfM evaluation



Test programme theory



- Theory-based design
- Is programme logic working?

Our client work highlights key messages for conducting a VfM assessment in a theory-based evaluation



Consider VfM early in policy development

Ensure appraisal assumptions can inform evaluation: link appraisal and evaluation

Build VfM into evaluation framework design and evidence collection



Identify distinct 'benefit pathways'

Avoid the risk of double counting where there are multiple benefits

Be conservative in assumption about overlaps



Be transparent

Not everything can be monetised

Present wider evidence on non-monetised benefits



Don't neglect social benefits

Can be critical distinct benefits pathways

Environment, health, well-being ...



Use scenarios and sensitivities

How large would value of benefits need to be to ensure policy costs are (at least) met?

How reasonable is this given evaluation data?



Think about geography

Evidence on regional employment / growth benefits as well as national

Evidence on leakage and substitution effects at different geographics may be needed

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