

# WARWICK OF UK CITIES PROJECT INNOVATIONS IN ECONOMIC IMPACT ASSESSMENT AND FUTURE DIRECTIONS



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**OUR AIM IS  
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# **INNOVATIONS IN ECONOMIC IMPACT ASSESSMENT AND FUTURE DIRECTIONS**

NICK HENRY, GRAHAM RUSSELL AND PATRYCJA KASZYNSKA

Within UK public policy, economic impact assessment (EIA) has been a long-run mainstream staple for assessing the benefits to society of a policy intervention. It has thus supported learning and policy design.

In 2021, DCMS published its Cultural and Heritage Capital Framework, which aims to allow the full value of arts, culture, and heritage to be recognised, including in EIA. Coventry UK City of Culture 2021 has sought to use an innovative approach to EIA to gain a more complete and better-grounded understanding of the benefits generated by this cultural mega-event. In this study, we outline this EIA approach and discuss how it may be considered in relation to the new DCMS Cultural and Heritage Capital Framework. Our aim is to support learning and the development of good practice in the use of non-reductive valuation frameworks within the cultural and heritage sphere.

# INTRODUCTION

*Within UK public policy, economic impact assessment (EIA) has been a long-run mainstream staple for assessing the benefits to society of a policy intervention.*

It has been used in the context of the UK City of Culture (CoC)<sup>1</sup> and across different cultural sector initiatives,<sup>2</sup> although not without controversy.<sup>3</sup>

**In the following, we introduce:**

- **how Coventry UK CoC 2021 has taken an innovative approach to EIA to gain a more complete and better-grounded understanding of the benefits generated by its City of Culture year, and**
- **how this approach can be considered in relation to the recently launched DCMS Cultural and Heritage Capital Framework to support learning and the development of good practice in the use of non-reductive valuation frameworks within the cultural and heritage sphere.**



<sup>1</sup> Culture, Place, & Policy Institute, University of Hull, *Cultural Transformations: The Impact of Hull UK City of Culture* (Hull, University of Hull, 2018), pp. 1-99.

<sup>2</sup> See the relevant case studies in Arts Council England, *Measuring the Economic Benefits of Arts and Culture. A Practical Handbook for Cultural Organisations* (London, ACE and BOP, 2012), pp. 7-14.

<sup>3</sup> See 'Case Study 3: The UK City of Culture' in Paul Frijters and Christian Krekel, *A Handbook for Wellbeing Policy-making: History, Theory, Measurement, Implementation, and Examples* (Oxford: Oxford University Press, 2021), pp. 354-369; for a general discussion not centred on the UK, see Jeanette D. Snowball and Geoffrey G. Antrobus, 'Valuing the arts: Pitfalls in economic impact studies of arts festivals', *South African Journal of Economics* 70(8) (2002), 1297-1319.

**THE USUAL WAYS OF ARTICULATING THIS ECONOMIC IMPACT ARE THE POUNDS VALUE OF ECONOMIC IMPACT, THE GROSS VALUE ADDED (GVA) TO THE ECONOMY, AND THE EMPLOYMENT IMPACT.**

### **Background to Economic Impact Assessment**

In its historical form, EIA might best be understood as a formalised analysis of the overall economic impact on a local, regional, or national economy of a specific economic development or infrastructure project such as business support, a new science park or inward investment project.

The assumption is that an intervention or private investment has put money into the local economy and, hopefully, catalysed additional and further economic multipliers and economic value as the original expenditure circulates, triggering further economic activity such as more valuable or greater amounts of goods and services, jobs, and tax returns.

The usual ways of articulating this economic impact are the pounds value of economic impact, the Gross Value Added (GVA) to the economy, and the employment impact.

Such impact can be further broken down by types of employment generated, the output across sectors, where geographically the impact has been, and the local assets and different social groups affected. These effects may be unevenly distributed and cause uneven long-run development, something that has recently been acknowledged by the UK government through its 'levelling-up agenda'.

Another way of describing the above is that when we spend money on something somewhere, we can 'model' the different ways in which that expenditure might flow through machines, people, supply chains, labour markets, how people consume and continue to spend the money they have earned, and so on in any chosen type of economy somewhere in an interconnected world. Furthermore, the assumption is that the change created by the intervention or investment

expenditure can be separated from any on-going changes happening anyway in that economy over time. Thus, there are a number of relatively standardised approaches that seek to understand fully the 'additionality' of an intervention or investment - in other words the scale and scope of the economic difference that the intervention actually makes to an economy.<sup>4</sup>

<sup>4</sup> Counterfactuals, deadweight, displacement, substitution, etc. are all terms for (sub) methodologies that seek to take into account what the economy was doing anyway to generate the desired economic outcomes (GVA, employment, etc.). It may be that the intervention or investment, as well as adding to the economy, inhibited or replaced what was already being done before. The hope is of course that once all these additions and subtractions are accounted for, there is a positive outcome.

Given the above description, the practice and methodologies of EIA have, over decades of usage, seen continuous and continued development and advancement, as researchers and policy makers seek to attain the most accurate assessment of what happens in the real economy when private investment decisions are made or taxpayers' money is spent on policy interventions.<sup>5</sup>

In addition to the incremental and continuous developments in the assessment of economic impacts (made possible by greater knowledge, new methodologies, advancements in computing power, and enhanced datasets) there have been further substantial developments to the coverage and practice of economic impact assessment. In turn, these can draw attention to the range of substantial assumptions made about 'the economy' within an EIA, such as how the economy is seen to 'work' and the data available that sit behind the economic values that are put forward.<sup>6</sup>

### The widening of the scope in EIA and recent developments

Over time, there has been a broadening of the usage of EIA across policy domains. This is relevant to the present discussion of the UK CoC programme and to the so-called *cultural value* debate more broadly.<sup>5</sup> For example, Myerscough's *The Economic Importance of the Arts in Britain* came out in 1988, long enough ago to have attracted followers as well as critics.<sup>8</sup> But notwithstanding the conceptual debates, it is now rare that a sporting or cultural mega-event is not subject to a major economic impact assessment. Indeed, the event's potential hosting is typically driven as much by its economic outcomes as its sporting and cultural impacts.<sup>9</sup> The usage of EIA in other policy domains, including those in the cultural sector, has brought to the fore the challenges of measuring the types of benefits and value generated that are central to such domains (for example, wellbeing,

**IT IS NOW RARE THAT A SPORTING OR CULTURAL MEGA-EVENT IS NOT SUBJECT TO A MAJOR ECONOMIC IMPACT ASSESSMENT.**

social cohesion, tranquillity, etc.). On the one hand, this has prompted considerations about the process of *monetisation* of those benefits, which brings us into the realms of *opportunity costs* (e.g., being able to match the total pounds value of the citizenry's better health from a hospital extension against the pounds value of the jobs created by a new science park).

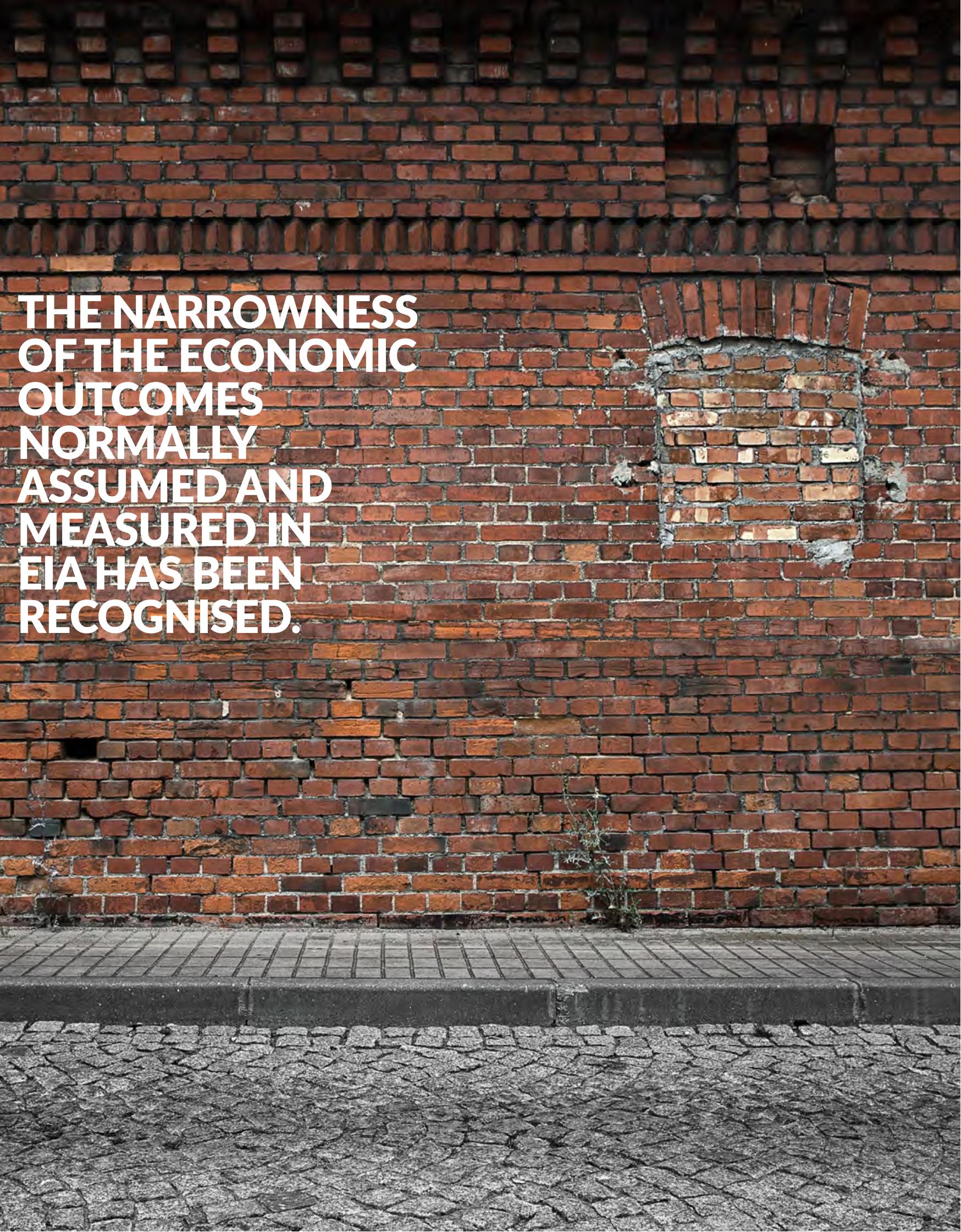
<sup>5</sup> See, for instance, Don Pickrell, 'The development of evaluation methods for infrastructure projects', in *Infrastructure Economics and Policy: International Perspectives*, ed. by José A Gómez-Ibáñez, J. and Zhi Liu (2021), pp.143-173.

<sup>6</sup> For example, as noted in Frijters and Krekel's (2021) comprehensive and forensic analysis of recent examples of EIA, many assumptions need to be made, including drawing figures from previous studies that themselves have included their own series of assumptions.

<sup>7</sup> The AHRC Cultural Value Project considered economic assessment alongside other forms, see Geoffrey Crossick and Patrycja Kaszynska, *Understanding the Value of Arts and Culture* (Swindon: AHRC, 2016) pp. 86-91.

<sup>8</sup> See, for instance, Eleonora Belfiore, "Impact", "value" and "bad economics": Making sense of the problem of value in the arts and humanities', *Arts and Humanities in Higher Education* 14, No. 1 (2015). 95-110.

<sup>9</sup> The practice underpinning the CoC UK programme is a good illustration of this.



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On the other hand, the ‘narrowness’ of the economic outcomes normally assumed and measured in EIA has been recognised. For example, we measure the number and type of jobs produced—and increasingly who gets them—but what about the additional health and well-being benefits dependent on who gets the jobs, especially if these outcomes are actually more valuable? Or how do EIAs account for findings that the health of a labour force may be a pronounced driver of economic output or, conversely, a drag on productivity?

These findings imply we can only fully incorporate the workings of the economy by making health part of our models. In another recent development, environmental outcomes such as sustainability are similarly relevant.

We also have to query how the effects of cultural engagement and arts participation, as they

interact with other economic and social variables, might be fully taken into account.

Set within this framework, the extent of the historical ‘narrowness’ of EIA orthodoxy becomes evident. Hence, the emergence over the last decade or so of a slow but persistent mainstreaming of natural capital into impact assessment, the rise of social value and wellbeing (and Social Return on Investment) and, most recently, the launch of the DCMS Valuing Culture and Heritage Capital Framework (more below).

### **Economic Impact Assessment in the context of UK City of Culture**

Increasingly, Cities of Culture and cultural programmes have entered into the umbrella of ‘mega-events’ alongside others such as the Olympics, World Cup, and Commonwealth Games.

As such, they form a cultural policy arena where impact evaluation and, in turn,

economic impact assessment has developed substantially.

In its early years, the rationale for European Cities of Culture (ECOC) was to highlight the richness and diversity of Europe’s cultural offer and the opportunities for cultural cooperation and exchange within a European community. The programme’s economic impacts were very much secondary to the celebration of a city’s culture. In contrast, the UK’s hosting of ECOC and UK City of Culture have been firmly framed as culture-led regeneration and economic development interventions.<sup>10</sup>

<sup>10</sup> See, for instance, Beatrix García, ‘Cultural Policy and Urban Regeneration in Western European Cities: Lessons from Experience’, *Prospects for the Future in Local Economy*, 19 (4) (2004), 312–326; Franco Bianchini, and Roberto Albano with Alessandro Bollo, A, ‘The regenerative impacts of the European City/Capital of Culture events’, in *The Routledge Companion to Urban Regeneration* ed. by Leary, M.E. and McCarthy, J. (London, Routledge, 2013), pp. 515-525.

Picking up on cultural participation antecedents from Derry-Londonderry UK CoC 2013 and Hull UK CoC 2017, and the broadening EIA developments described above, Coventry UK CoC 2021 has been distinctive in seeking a stronger balance of social, cultural, and environmental outcomes. These run alongside the now common economic impacts based upon visitors and their expenditure, and the development of the cultural and creative sector.<sup>11</sup> In turn, the evaluation framework, approach, and methodology generated for CoC 2021 has sought to carry through this emphasis, most obviously in its decision to contract (and seek to give equal weighting to) a social value assessment as well as an economic impact assessment, with the ambition of combining them to provide a 'total value' of the impact of CoC 2021.<sup>12</sup> Coventry's approach recognised the challenges of such an aim, both in terms of scale (city-wide,

year-long, several hundred activities), and the difficulties of applying such techniques to the cultural domain and across methods and disciplinary backgrounds.

In that sense, the approach deliberately sought to test boundaries and was aware of the inherent risks of seeking to do so.

### **An Economic Impact Framework for Coventry, UK CoC 2021**

AMION Consulting were asked at the EIA contracting stage to seek to 'push at the boundaries' in terms of valuation and assessment, and to incorporate environmental and social value.

For AMION that meant inserting its best practice EIA into the culture domain.<sup>13</sup>

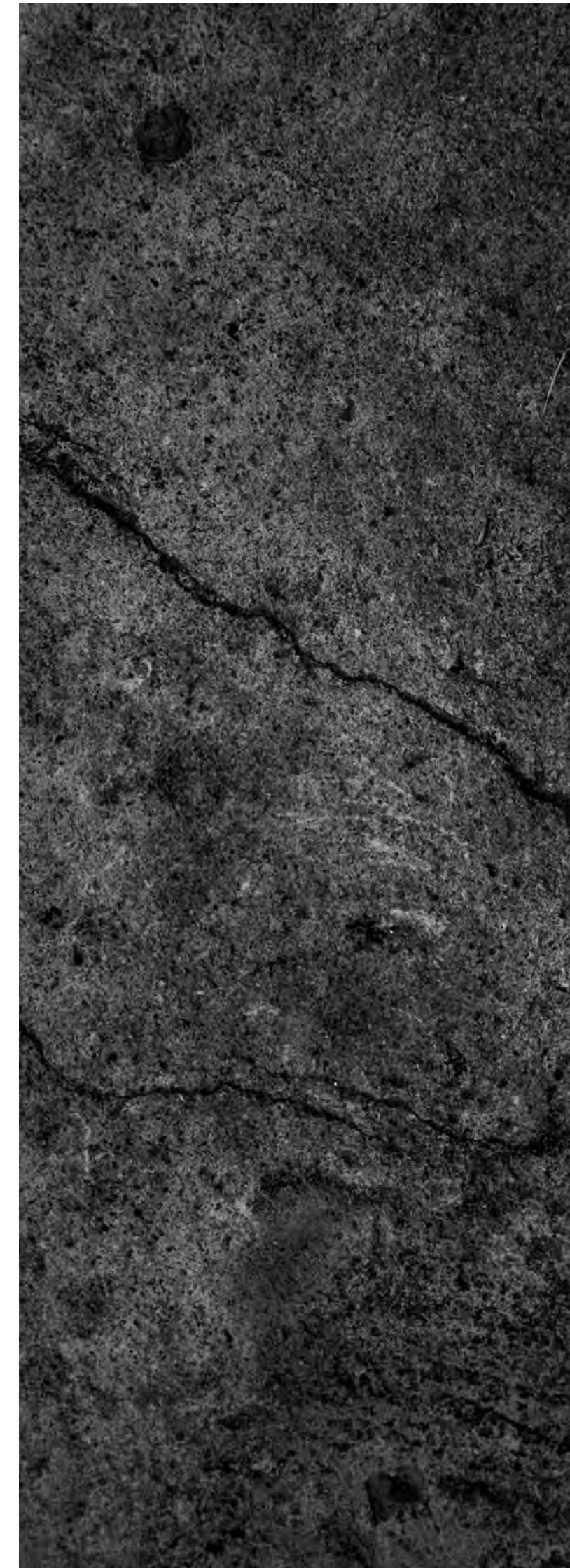
AMION sought to 'push at the boundaries' in the following areas:

- Extended Economic Impact Assessment to include a **Social Cost Benefit Analysis (SCBA)** compliant with HM Treasury (HMT) guidance.<sup>14</sup>

- **A Counterfactual Impact Evaluation** model that directly addresses the spatial nature of CoC 2021 as an intervention (i.e., Coventry and its city region).
- **A mixture of monetised and textual valuation** (quantitative and qualitative information) incorporated within an Evaluation Summary Table.

The focus of the EIA was on assessing whether the delivery of CoC 2021 was meeting a number of key objectives in terms of:

- Uplifting the local economy;
- Increasing tourism;
- Growing and strengthening the cultural and creative sectors;
- Attracting investment into the city of Coventry and the wider Warwickshire area; and
- Promoting inclusive growth.



<sup>11</sup> This can be seen in Coventry's Theory/ Story of Change for its City of Culture and the range of fifteen outcomes it sought to achieve; see Monitoring & Evaluation - Evaluating Coventry UK City of Culture 2021 ([coventry21evaluation.info](http://coventry21evaluation.info)).

<sup>12</sup> The City of Culture Trust contracted two independent evaluation consultancies AMION Consulting and MB Associates to undertake these assessments. The Trust were guided in their decision by the CoC 2021 Core Monitoring and Evaluation Group, comprising Coventry City Council, Coventry University, and University of Warwick. The Core group had its own advisory Technical Reference Group, which included DCMS, Arts Council England, the What Works Centre for Well-Being, and a number of cultural organisations, experts, and academics in the field.

<sup>13</sup> AMION Consulting have undertaken economic impact assessments at the heart of UK and regional government for several decades. In 2014, the firm established a new Visitor and Leisure Team, which provides specialist advice on visitor attractions, culture, heritage, museums, arts, leisure, entertainment, and tourism.

<sup>14</sup> This takes account of the latest HMT Green Book issued in 2022, with its greater emphasis on Place-based impacts, Distributional impacts, Equalities, and Environmental impacts.



The extension of EIA to include a SCBA for CoC 2021 has sought to i) identify monetisable costs and benefits, ii) quantify non-monetisable costs and benefits, and iii) detail qualitative unquantifiable costs and benefits.

***The process design thus rejected the narrow focus of the traditional EIA whereby only that which can be reliably monetised is included within the assessment (or recognised in any meaningful sense).***



## THE SCBA APPROACH USED IN COC 2021

The SCBA approach developed for CoC 2021 aims to provide a comprehensive and consistent comparison of costs and benefits by incorporating factors that cannot always reliably be monetised. This enables fuller judgements of value for money (VFM) to be made, with the full extent of the costs and the benefits of CoC being set out.

The value—Net Present Social Value (NPSV)—of the programme is calculated by comparing the value of benefits with the costs. The Benefit Cost Ratio (BCR) is then a simple calculation where the benefits (or NPSV) are divided by the relevant costs.<sup>15</sup> The scope of the costs and benefits using the SCBA approach (based on HMT's Green Book 2022) includes:

<sup>15</sup> In principle, the Benefits Costs Ratio (BCR) calculation allows comparison of any policy intervention in one domain, say international trade, with another, say community midwives or a public arts trail, as a BCR could be generated for all (assuming the ability to undertake a robust assessment of costs and benefits across these different contexts).

### A: Costs

- Total direct public costs to the originating organisation (both capital and revenue);
- Total indirect public costs to public bodies;
- Wider societal costs including monetisable costs (including cash), un-monetisable costs associated with quantifiable impacts, and wider qualitative but unquantifiable costs; and
- Total risk costs including the cost of risk mitigation or management (this helps reduce levels of optimism bias in the calculations of forecast costs and benefits).

### B: Benefits

- Direct public sector benefits to the originating organisation, including increased cash revenues, monetisable non cash-releasing benefits (e.g., increased visitor numbers), quantifiable but non-monetisable benefits (e.g., visitor satisfaction), and qualitative unquantifiable benefits (e.g., improved staff morale);
- Indirect public sector benefits to other public sector bodies (as above); and
- Wider benefits to society (including households, individuals, and businesses): including monetisable and cash benefits (such as increased incomes), un-monetisable benefits associated with quantifiable impacts (such as better health), and wider qualitative but unquantifiable benefits (such as increased social cohesion and civic pride)

## THE SCBA APPROACH USED IN COC 2021

A number of techniques and approaches can be used in the valuation of benefits. In the case of the CoC 2021 evaluation these include:

- Quantification of usage of and attendance at facilities and events and the characteristics of attendees/beneficiaries;
- Assessment of the nature and quality of the assets/services (events);
- Use of both market prices and non-market valuations;
- Specific approaches for assessing and valuing certain benefits, for example:
  - Land value uplift
  - Health benefits
  - Wellbeing
  - Travel time/cost
  - Productivity effects

All transfer payments—for example, benefit payments—are excluded from the calculations. In addition, the residual value of an asset or liability at the end of the appraisal period is included.

The resulting values of both costs and benefits are then adjusted to take into account a number of factors including:

- Inflation: expressing costs (and benefits) in constant (or real) prices by removing the impact of general inflation
- Additionality: the extent to which an intervention generates an activity and/or results that take place at all, on a larger scale, earlier, or within a specific designated area or target group<sup>16</sup>
- Persistence: allowing for the duration and decay of benefits. For example, the benefits of a one-off event (notwithstanding the potential creation of a virtual artefact) are likely to be less persistent than those of a permanent art installation

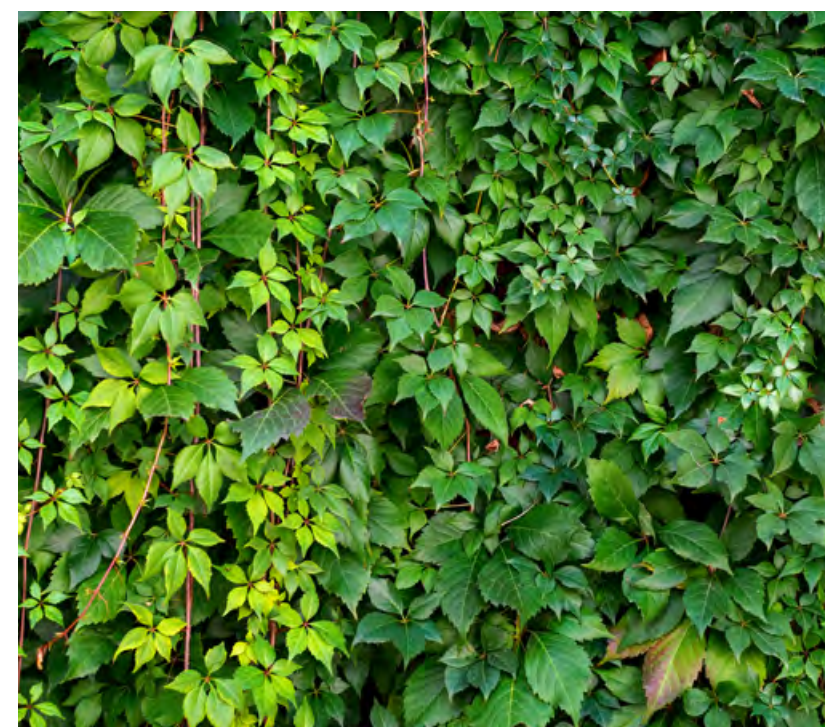
- Discounting: giving preference to present benefits over future benefits, based on the view that people generally prefer to receive goods and services now rather than later
- Unquantifiable costs and benefits: using evidenced assessments (e.g., survey responses) to ensure that such costs and benefits are included within the overall assessment
- Uncertainty, risk, and optimism bias: appropriate adjustments for identifiable (risks) or unidentifiable (uncertainties) factors that may impact on costs (or benefits) and for optimism bias.<sup>17</sup>

<sup>16</sup> The concept of additionality is central to the evaluation of the outputs, outcomes, and other benefits of public sector interventions. It is used to convert gross effects into net effects and is crucial to the meaningful assessment of, for example, the cost-benefits of interventions: the net additional impact after allowing for deadweight, displacement, leakage, and multiplier effects.

<sup>17</sup> Optimism bias is the systematic tendency for appraisers and promoters to be overly optimistic about an intervention's costs and benefits.

The AMION approach has introduced a further methodological innovation in its approach to Counterfactual Impact Evaluation. The usual approach for counterfactual assessment is to try and ‘match’ a group who are not part of the investment against those who are (e.g., firms who receive, say, a business support intervention versus those of the same size and sector who do not) and trace their respective performances before and after the intervention. The assumption is that the context and business environment for both sets of businesses are similar, and so it is the intervention that creates any difference in the groups’ performances. In reality, this matching activity is easier to state than deliver, given that matches are rarely perfect because of variations in business characteristics (age, ownership, management capability, etc.) or other factors (including other policy support received in the local economy).

Area-based evaluations add another layer of complexity in that the businesses supported are located in a specific geography, in which case locational characteristics—both observable and unobservable—may also play a role in determining intervention outcomes. In the case of CoC 2021, the area is the city of Coventry, which begs the question: where is Coventry’s comparator city? Note that the comparator city needs to be one that has the same observable characteristics but does not have a City of Culture taking place; nor is its other policy activity significantly different to that of Coventry’s.



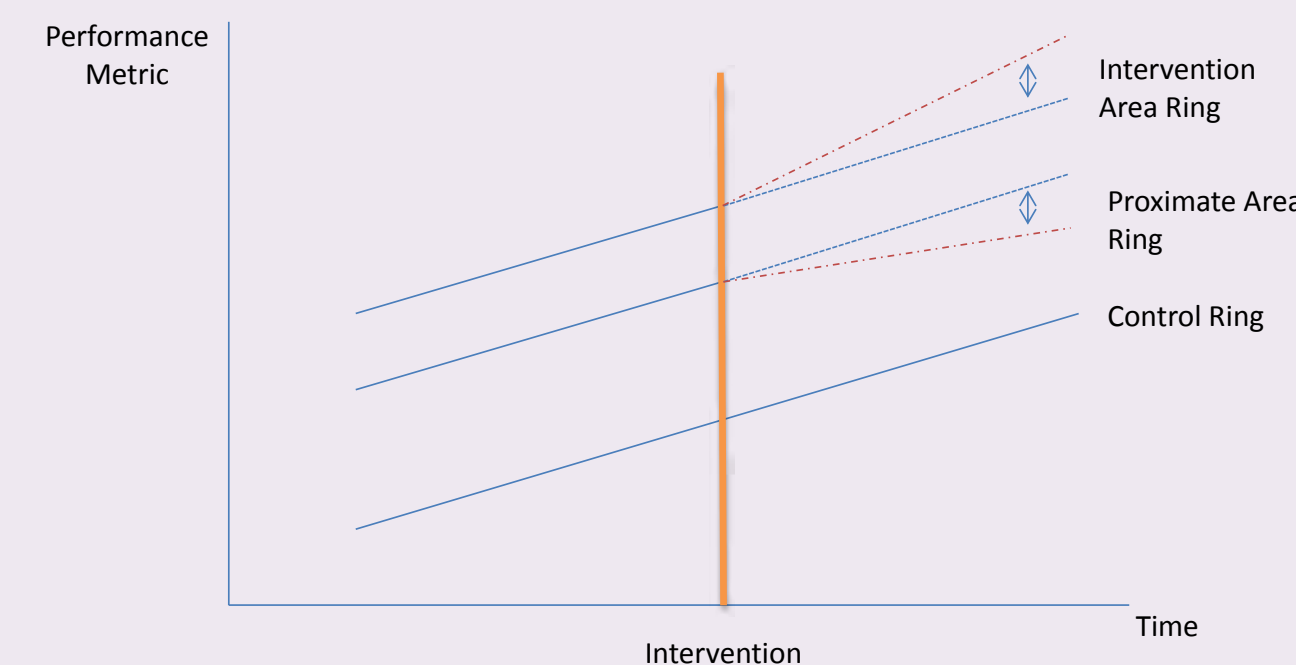
## SPATIAL DISCONTINUITY DESIGN USED IN COUNTERFACTUAL ANALYSIS IN CoC 2021

Given the improbability of a match, AMION has developed an alternative spatial discontinuity design whereby impact is evaluated in terms of performance both within and just beyond the target area, taking into account the pre- and post-intervention performance trends (Figure 1). This approach has a number of advantages. It may be argued that wider, unobservable influences that affect both areas are likely to be similar and are therefore automatically taken into account. Unobserved individual differences affecting an outcome, irrespective of treatment, can be differenced out, on average, while analysis around boundaries facilitates the identification of the existence (or otherwise) and the scale of displacement and spillover effects related to the intervention.

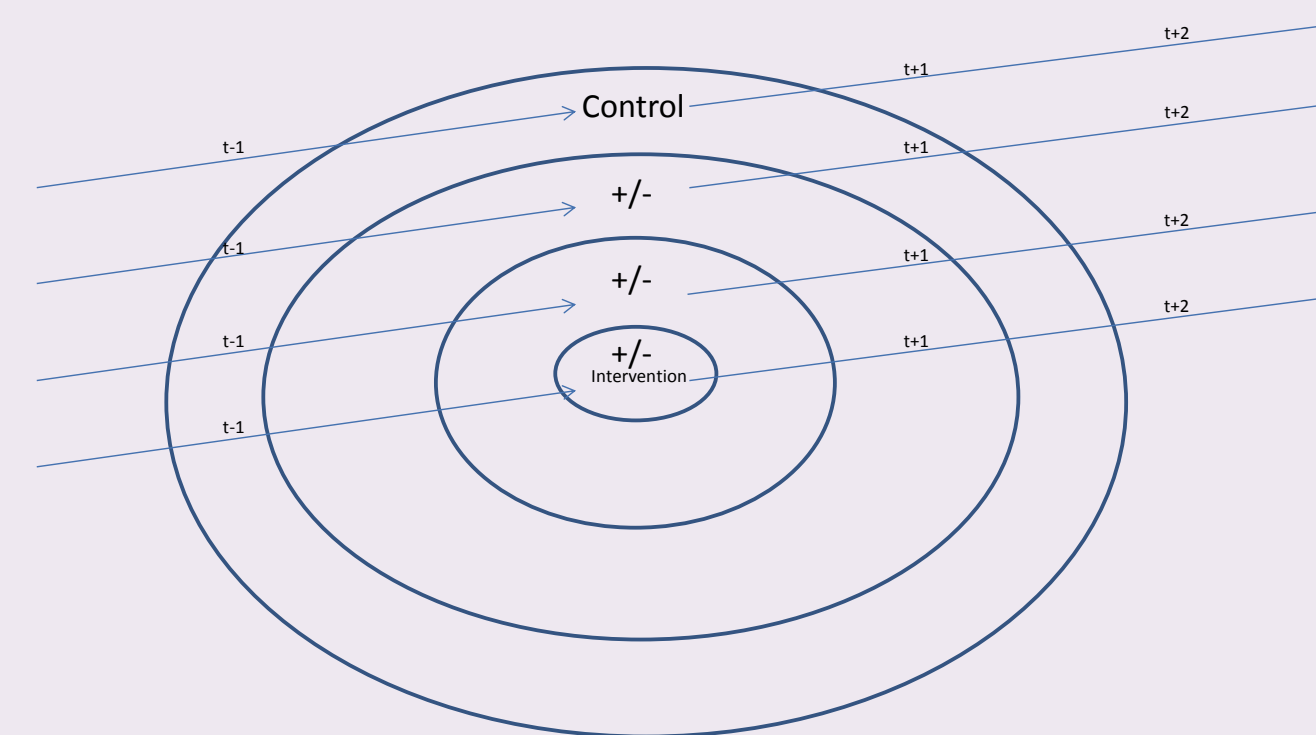
Using the above design to identify the counterfactual, the costs and benefits of ‘what would have happened’ can then be subtracted from the costs and benefits of the intervention (in this case the CoC) to calculate the generated value that can be attributed to the programme.

Figure 1: Counterfactual Impact Evaluation

### Approach



### Spatial Discontinuity Design



## Introducing Capitals and the Culture and Heritage Capital Framework

CoC 2021 coincided with the publication of 'Valuing culture and heritage capital: a framework towards informing decision making' and the official launch of the Culture and Heritage Capital (CHC) Programme in January 2021.

Adopting a 'capitals approach', DCMS's CHC Programme signalled its ambition for a 'transformational and cultural change to assessing value for money through robust appraisal and evaluation'.

The core premise supporting this ambition is the use of a cultural 'stock and flows of services' model to conceive the value of arts, culture, and heritage and the development of a formal approach for valuing culture and heritage assets conceived through this lens (see opposite).

## DCMS CULTURE AND HERITAGE CAPITAL FRAMEWORK

As explained by Sagger, Phillips and Haque (2021) in DCMS 'Valuing Culture and Heritage Capital: A framework towards informing decision making' (p.12):

[...] culture and heritage assets contribute to achieving the outcomes we seek as individuals and society more generally and how we aim to capture these benefits in a stocks and flows framework.

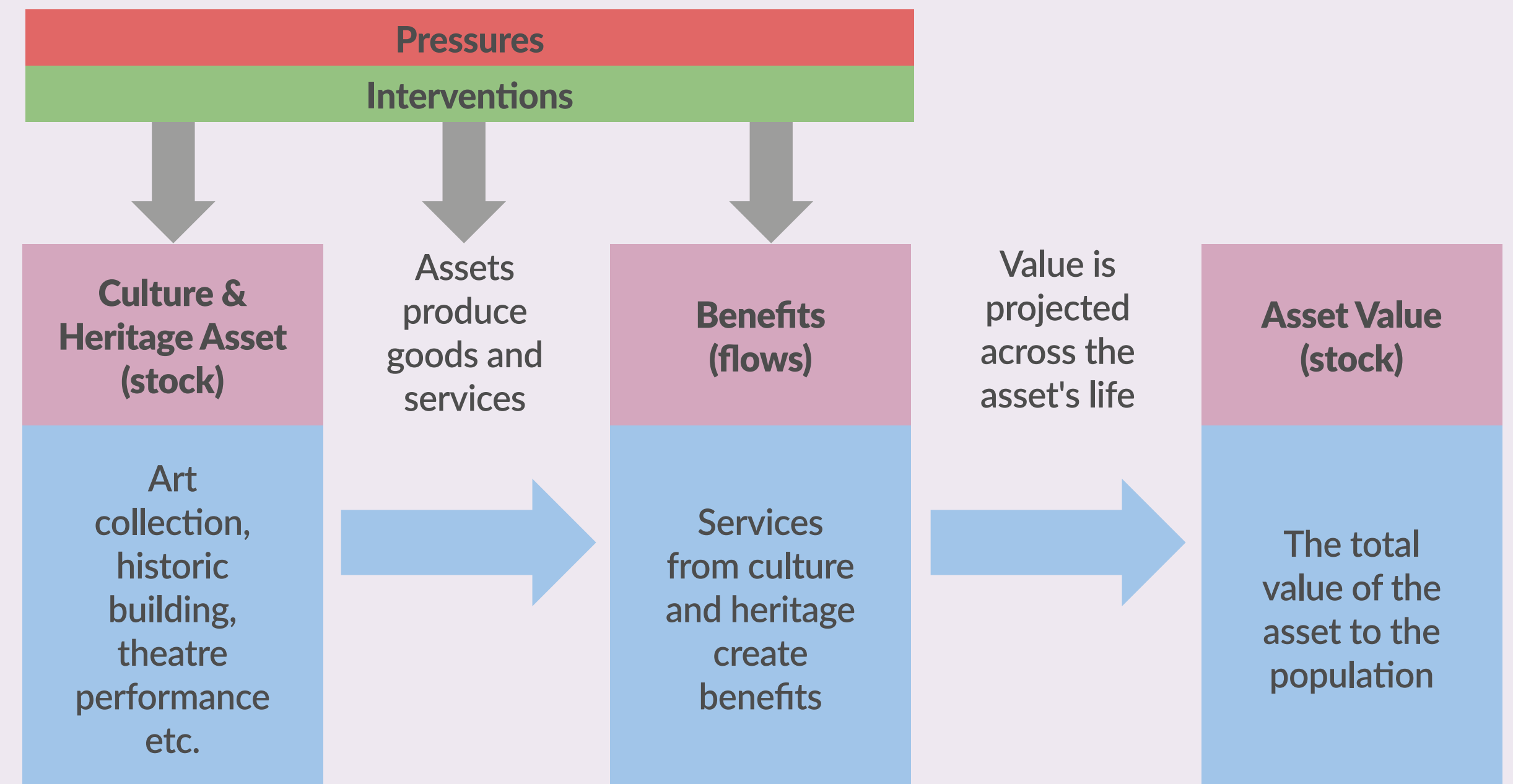
The assets, for example an art collection or historic building, are the "stock", while the services that create benefits to society are regarded as "flows".

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, additional inputs and effective policies 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 [...]

Figure 2: The DCMS stocks and flows model of cultural capital



Looking beyond the DCMS agenda and at some earlier precedents concerning natural capital, the development of capitals approaches—based on a stock and flows model—has, in many ways, been driven by a dissatisfaction with how economics has been used in policy making.<sup>18</sup>

For example, the capitals models recognise that GDP is an incomplete indicator of economic success and that having it as a foundation for decision making may be misleading. From the point of view of the capitals approaches, GDP reflects increases in produced capital but is blind to depreciation in other forms of capital.

For example, pollution from factories generating GDP has degraded—and therefore depreciated—air and water quality and assets.<sup>19</sup> Much standard economics, including EIA, contain the predicament of 'missing capitals': namely that the nation's wealth comprises a great number

of assets across different types of capitals that are largely invisible in the calculations. Hence, developing 'inclusive wealth' accounts means that the conventional flow accounts of economic activity need to be supplemented with accounting for the assets that make those flows possible (D. Coyle, personal communication, March 2022).<sup>20</sup> In short, fully understanding the economy and the role that cultural capital plays in it requires a number of different types of capitals and their interactions to be observed, measured, and accounted for.

Another interesting feature of the capitals model is that it makes sustainability an integral part of decision making, as the current value of an asset depends on assumptions about the future flows of services from this asset. Crucial to the definition of capital is that it is understood as a stock of resources or assets that provide a flow of useful goods or services, now and in the future.

The stocks of assets from which services flow can be thus thought of as stores of value that can increase or be depleted.

Crucially, stocks of various capitals have to be maintained and managed to produce value over time; moreover, their present value depends on their ability to release value in the future. What is at issue, in Dasguta's words, is 'not only the worth to people who are alive at that date, but also to future people'.<sup>22</sup>

The significant shifts necessitated by the adoption of the capitals framework present challenges for standard economic approaches, such as EIA, in which considerations of value as temporally extended and relational to other capitals (note the plural), and inter-related in terms of value creation, have largely been absent.



<sup>18</sup> Robert Constanza and Herman, E. Daly, 'Natural Capital and Sustainable Development', *Conservation Biology* 6 (1) (1992), 37–46.

<sup>19</sup> Kenneth Arrow, Partha Dasgupta, Lawrence Goulder, Gretchen Daily, Paul Ehrlich, Geoffrey Heal, Simon Levin, Karl-Göran Mäler, Stephen Schneider, David Starrett, and Brian Walker, 'Are We Consuming Too Much?' *Journal of Economic Perspectives*, 18, 3 (2004), 147-172.

<sup>20</sup> According to the World Bank's Comprehensive Wealth' framework, this includes produced, natural, human, and social capital. According to the influential 'Dasgupta Review', accounts can be divided into two broad types: standard assets whose service flows act as inputs into consumption or the production process (produced, natural, human) and are physically embodied; and enabling assets that improve the use of these inputs (intangibles, social, and organisational capital).

<sup>21</sup> See, for instance, Rudolf De Groot, Luke Brander, Sander Van Der Ploeg, Robert Costanza, Florence Bernard, Leon Braat, Mike Christie, et al., 'Global estimates of the value of ecosystems and their services in monetary units', *Ecosystem Services* 1, No. 1 (2012), 50-61.

<sup>22</sup> Partha Dasgupta, *The Economics of Biodiversity: The Dasgupta Review* (London: HM Treasury, 2021), p. 326.

### Mapping the CoC 2021 approach onto the DCMS CHC framework

The CoC 2021 EIA had already commenced when the DCMS CHC Programme was officially launched. AMION was invited by the DCMS to think through how their approach would map against the recently launched framework. This implied using the DCMS model of stocks and flows as the conceptual basis.

The following step-by-step analysis was undertaken to test the possibility of convergence between the EIA and the CHC framework. First, considering CoC 2021 in terms of the DCMS model suggests that the year of CoC 2021 is a set of assets that gain investment (venues, etc.), and that services (the programme of cultural activities) were being funded which generate benefits for subsequent valuation.

Subsequently, AMION identified a list of benefits 'flowing' from and generated by the CoC 2021 input to stocks (assets and services).

These benefits were then mapped across four categories of impact: economic, environmental, social, and public accounts, using the current common language of other policy domains (in Green Book analysis). For example, economic benefits could include tourism but also forms of productivity and placemaking; environmental could include air quality and biodiversity; social benefits might include welfare, health, social cohesion, and so on; and public accounts include related public costs and indirect tax revenues generated. These categories and subcategories of impact were in turn mapped against the CoC 2021 investment programmes and thematic activities.

The results and the detailed exposition of the approach will be reported in an Evaluation Summary Framework (EST) to be published in 2023.<sup>23</sup> The EST will bring the key evaluation evidence together into a single table by presenting Present Value Benefits, Present Value Costs/(Surplus),

Net Present Social Value, Benefit-Cost Ratio, Significant Non-monetised impacts, and Value for Money. Thus, it will give monetary estimates alongside other factors that cannot be reliably monetised as the basis for an overall judgement on value for money for CoC 2021.

The CoC 2021 approach proposed by AMION is interesting in that it has a broader (i.e., beyond economic) understanding of value created. Even though it does not start with the objective of observing the relationship between the capitals, the proposed approach, by rooting itself in a place-based approach, can track different dimensions and register how they interact, irrespective of whether they can be monetised. These broader developments in the sources and types of value that EIA practice includes highlight that, in the main, EIA has historically been used to value the benefits deriving only from one form of capital: financial.



This reflects a narrow understanding of the economy that is at odds with the recognition by economists (among others) that capital (inputs to production) comes in many forms that collectively feed into societal wellbeing in its fullest sense.

The next step to fully embedding the capitals framework will be to move beyond simply reporting the impacts across the different dimensions distinguished in the CoC 2021 EIA, and towards measuring how the relationships between the types of capital

contribute to value creation. Shifting towards a robust capitals model will be challenging.

The research building on the publication of the [Scoping Culture and Heritage Capital report](#) as well as the activities growing out of this [Future Trends](#) series can support the development of the CHC agenda.

<sup>23</sup> A major report including the economic impact of Coventry City of Culture 2021 is expected to be released in April/May 2023. A further update will be completed in November 2024, given Coventry's evaluation approach of seeking longitudinal impact assessment.

**THE EXPERIENCE  
OF MAPPING  
THE CoC 2021  
APPROACH  
ONTO THE CHC  
FRAMEWORK  
HAS HIGHLIGHTED  
SOME INITIAL  
IMPLICATIONS  
FOR THE ONGOING  
WORK ON  
DEVELOPING  
THE DCMS  
FRAMEWORK.**

**Future trends and  
recommendations**

In this document we have explained the CoC 2021 EIA model, together with the innovations it has introduced.

The model can be applied to a wide range of cultural (and other) programmes and projects.<sup>24</sup> We have also introduced some key considerations driving the development of capitals approaches, including the DCMS CHC framework.

Even though the CoC 2021 approach was not developed within the starting premises of the DCMS CHC framework, the experience of mapping the CoC 2021 approach onto the CHC framework has highlighted some initial implications for the ongoing work on developing the DCMS framework.

These include:

- The need for ongoing development of taxonomies of services and associated benefits. For example, an events-based policy arena such as CoC can be seen to include the provision of an array of ‘consumption services’ that do not necessarily involve capital expenditure or the direct use of previously defined existing assets. There is a need to consider, develop, and refine how such activities fit within the stocks and flows taxonomy. Relatedly, how does a mega-event such as CoC—as a localised and place-specific intervention—support the testing and refining of overarching categorisations of services and benefits?
- The use of the capitals model in conjunction with stakeholder analysis, capitalising on and nudging a greater convergence between the social value measurement and economic valuation undertaken in the context of CoC 2021.<sup>25</sup>
- Residual value and opportunity cost. Where an asset has been created and has a value at the end of the evaluation (or appraisal) period, this should be included within the Framework. Similarly, the opportunity cost of any assets should be considered.
- Externalities. These refer to the cost or benefit of an economic activity experienced by an unrelated third party (e.g., the external costs of transport associated with an event). Consideration must continue to be given to how externalities should be treated.
- Additionality. The framework would benefit from greater discussion of the issue of additionality, which is fundamental to any evaluation or appraisal.

<sup>24</sup> For smaller interventions, a proportionate approach would be applied. For example, applying a benefits transfer approach relying on secondary data can be used to estimate nonmarket economic values by transferring available information from original studies already completed.

<sup>25</sup> See Social Value Creation and Measurement in the Cultural Sector, published as part of the present series.

## Postscript

Although wider concerns remain about the pervasiveness of monetisation and valuation, and their ever-increasing extension to aspects of social life, the greater use of standardised and recognised techniques—as well as the adoption of new approaches compatible with policy decision making—will arguably put the cultural sector in a stronger position to achieve the levels of investment in cultural capital that are appropriate to its full value to society in public policy terms.<sup>26</sup>

However, we end this study by noting, with a degree of irony, the limits of EIA in responding to the real economy.

The commencement of Coventry's CoC was delayed from January 2021 to May 2021 because of the pandemic. Whilst the impact of the pandemic was varied and ever changing, it should be noted that the entire period of the CoC was heavily affected by

the various 'lockdowns' and government restrictions that impacted on working and personal lives, especially for those with health issues.

Usually, EIAs for festivals and mega-events are constructed around two key income flows: event expenditure and visitor expenditure. While overnight stays are especially relevant, expenditure from day trippers (beyond 'locals' and their displaced expenditure from the cultural spending they would have undertaken anyhow) also counts.

During the pandemic, overnight stays and even day visits were risky and at times illegal; even when permitted, they were often not easily achieved due to supply constraints as the economy sought to recover post-pandemic. Moreover, whatever baselines and counterfactual data exist, they do not take into account an economic shock for which there are scarcely any historical antecedents.

This points to not just the expected reduction of the benefits calculated through the CoC 2021 EIA but also, and more broadly, the constraints of EIA approaches when used in isolation. For CoC 2021, the EIA has sought to identify a wider set of social benefits and there is evidence that, in contrast to immediate tourist value, CoC's co-creation approach, which was based on localised, resident-targeted programming, has generated a substantial and deep array of forms of social value that were meaningful to those who participated.<sup>27</sup>

<sup>26</sup> The CHC agenda pursued by DCMS is premised on this assumption, even though the implications of adopting the capitals framework are far reaching and go beyond concerns with monetisation to the ethics of monetisation driving decision making.

<sup>27</sup> See the other contributions to the Future Trends Series: 'Social Value Creation and Measurement in the Cultural Sector' and 'Reasons to Co-create'.

**IN CONTRAST TO IMMEDIATE TOURIST VALUE, COC 2021'S CO-CREATION APPROACH, WHICH WAS BASED ON LOCALISED, RESIDENT-TARGETED PROGRAMMING, HAS GENERATED A SUBSTANTIAL AND DEEP ARRAY OF FORMS OF SOCIAL VALUE THAT WERE MEANINGFUL TO THOSE WHO PARTICIPATED.**



## REFERENCES

- Arrow, Kenneth, Partha Dasgupta, Lawrence Goulder, Gretchen Daily, Paul Ehrlich, Geoffrey Heal, Simon Levin, Karl-Göran Mäler, Stephen Schneider, David Starrett, and Brian Walker, 'Are We Consuming Too Much?' *Journal of Economic Perspectives*, 18, 3 (2004), 147-172
- Arts Council England, *Measuring the Economic Benefits of Arts and Culture. A Practical Handbook for Cultural Organisations* (London: ACE and BOP, 2012)
- Belfiore, Eleonora, "Impact", "value" and "bad economics": Making sense of the problem of value in the arts and humanities', *Arts and Humanities in Higher Education* 14, No. 1 (2015), 95-110
- Bianchini, Franco and Roberto Albano with Alessandro Bollo, A., 'The regenerative impacts of the European City/Capital of Culture events', in *The Routledge Companion to Urban Regeneration* ed. by Leary, M.E. and McCarthy, J. (London: Routledge, 2013), pp. 515-525
- Constanza, Robert and Herman, E. Daly, 'Natural Capital and Sustainable Development', *Conservation Biology* 6 (1) (1992), 37-46
- Crossick, Geoffrey and Patrycja Kaszynska, *Understanding the Value of Arts and Culture* (Swindon: AHRC, 2016)
- Culture, Place, & Policy Institute, *University of Hull, Cultural Transformations: The Impact of Hull UK City of Culture* (Hull: University of Hull 2018)
- Dasgupta, Partha. *The Economics of Biodiversity: The Dasgupta Review* (London: HM Treasury, 2018)
- De Groot, Rudolf, Luke Brander, Sander Van Der Ploeg, Robert Costanza, Florence Bernard, Leon Braat, Mike Christie, et al.. 'Global estimates of the value of ecosystems and their services in monetary units', *Ecosystem Services* 1, No. 1 (2012), 50-61
- Ferreira, Susana, and Kirk Hamilton. 'Comprehensive wealth, intangible capital, and development', *Intangible Capital, and Development* (October 1, 2010). *World Bank Policy Research Working Paper* 5452 (2010)
- Frijters, Paul, and Christian Krekel, *A Handbook for Wellbeing Policy-making: History, Theory, Measurement, Implementation, and Examples* (Oxford: Oxford University Press, 2021)
- García, Beatriz, 'Cultural Policy and Urban Regeneration in Western European Cities: Lessons from Experience, Prospects for the Future', *Local Economy* 19 (4) (2004), 312-326
- Myerscough, John. *The Economic Importance of the Arts in Britain*. (London: Policy Studies Institute, 1988)
- Pickrell, Don, 'The development of evaluation methods for infrastructure projects', in *Infrastructure Economics and Policy: International Perspectives*, ed. by Gómez-Ibáñez, J and Liu, Z. (Cambridge USA: Lincoln Institute of Land Policy, 2021), pp. 143-173
- Sagger, Harman, Jack Philips, and Mohammed Haque, *Valuing Culture and Heritage Capital: A Framework Towards Informing Decision Making* (London, DCMS, 2021)
- Snowball, Jeanette D., and Geoffrey G. Antrobus, 'Valuing the arts: Pitfalls in economic impact studies of arts festivals', *South African Journal of Economics* 70(8) (2002), 1297-1319

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