

HUB-IN Common Impact Assessment Framework



HUB-IN Common Impact Assessment Framework

PREPARED BY

Chris Taylor, Amarvir Singh-Bal (Connected Places Catapult WP5)
Email: chris.taylor@cp.catapult.org.uk
Email: amarvir.singh@cp.catapult.org.uk

WITH CONTRIBUTIONS FROM HUB-IN partner cities, work package partners and colleagues at Connected Places Catapult

REVIEWED BY

Vera Gregório (Lisboa E-Nova),
Mara van Twuijver (Utrecht University)
Niels Bosma (Utrecht University)
Brian Smith (Secretary General, Heritage Europe (EAHTR))

HOW TO CITE THIS DOCUMENT

Taylor C., Singh-Bal A., (2022). Common Impact Assessment Framework, HUB-IN project - Hubs of Innovation and Entrepreneurship for the Transformation of Historic Urban Areas H2020-SC5-2019, GA 869429.

PROJECT INFORMATION

Project name: HUB-IN Grant agreement number: 869429 Project duration: 2019-2024

Project coordinator: Vera Gregório, Agência de energia e ambiente de Lisboa (Lisboa E-nova)

Address: Rua dos Fanqueiros 38, 1 andar, Lisboa 1100 231, Portugal

Email: veragregorio@lisboaenova.org

DISCLAIMER

The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein. This document contains materials that are copyrighted by the HUB-IN consortium partners, and may not be reproduced or copied without written permission. All HUB-IN consortium members have agreed to publish in full this document. The commercial use of any information contained in this document may require a license from the owner of that information. Neither the HUB-IN consortium as a whole nor any individual party, provide any guarantee that the information contained in this document is ready to be used as it is, or that use of such information is free from risk, and will accept no liability for any loss or damage experienced by any person and/or entity using this information.

STATEMENT OF ORIGINALITY

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

Table of contents

1	Introduction	5
1.1	About this document	5
1.1.1	Purpose.....	5
1.1.2	Scope.....	6
1.1.3	Audience.....	7
1.1.4	Companion documents.....	8
1.1.5	Structure	9
2	Research approach.....	10
2.1	Methodology	10
2.2	Terminology	12
3	Impact assessment on HUB-IN.....	13
3.1	General good practice	13
3.2	Cultural heritage findings	17
3.3	The unique HUB-IN model	20
3.4	Principles for HUB-IN.....	25
3.5	Considerations for HUB-IN	26
3.5.1	Challenges on existing data	26
3.5.2	Intervention effects	29
4	Indicators	31
4.1	Common indicators.....	31
4.2	Bespoke indicators	36
5	Tailoring indicators to the Cities.....	39
6	Leveraging results across HUB-IN	41
6.1	Quarterly review process (D5.3).....	41
6.2	Overall evaluation of the city interventions (D5.4)	42
6.3	HUB-IN Guidebook for cities (D5.5)	42
7	Risks	43
8	Bibliography	45
9	Appendices	47
9.1	Glossary of terms.....	47
9.2	Intervention effects – treatment on HUB-IN	48
9.3	Data collection guide – stakeholder focus group.....	55
9.4	Data collection guide – stakeholder survey.....	58
9.5	Data collection guide – SME survey	63
9.6	Data collection guide – community survey	70
9.7	Data collection guide – city team knowledge.....	74
9.8	Data collection guide – WP4 data.....	75
9.9	Data collection guide – survey good practice	76
9.10	Project KPIs not in scope for WP5.....	82

About HUB-IN

Vision

HUB-IN expects to contribute to reverse trends of abandonment and neglect of historic heritage in cities in a systemic way through the creation of networks of Hubs where innovation will be the main driver. The project will also have a direct impact on the creation of new sustainable opportunities for local traditional businesses and for the development of new creative skills and jobs.

Mission

The project ‘Hubs of Innovation and Entrepreneurship for the Transformation of Historic Urban Areas’ (HUB-IN) aims to foster innovation and entrepreneurship in Historic Urban Areas (HUA), while preserving their unique social and cultural identity and the environment. The project adopts innovation and entrepreneurship as the main drivers of urban regeneration in HUAs and is fully aligned with European and international policy (see *HUB-IN Alignment with European and International Policy (2021)*¹ for an overview).

The Hubs of Innovation and Entrepreneurship will test, demonstrate and pilot activities of co-creation and co-design in three main clusters with the potential to deliver sustainable transformation of HUAs: 1) Culture and Creative industries, 2) New Lifestyles and 3) Resilient and Human Connected Places.

Consortium

The HUB-IN project consortium is made up of eight pilot cities, expert agencies, universities, city networks and regional agencies:



1 Introduction

1.1 About this document

1.1.1 Purpose

The Common Impact Assessment Framework exists to help HUB-IN cities capture and understand the benefits of the HUB-IN activities in their Historic Urban Area. It is designed to deliver an overall and comprehensive framework to understand and capture the benefits and impacts of HUA conducted activities, including relevant metrics for the expected economic, environmental and social impacts. It intends to balance the need for being bespoke to HUB-IN's ambitions yet flexible enough to be applicable across different technologies and local contexts in the different cities. Using existing impact assessment methods as guidance, the framework proposes relevant indicators and takes into consideration key concepts such as spatial and temporal boundaries, and notable intervention effects such as the displacement and leakage of benefits. It further serves as a mechanism for drawing lessons from the pilot cities, such that their successes can be built on by a wider network of other historic cities across Europe and beyond.

Thus this framework provides methods, indicators and data standards to help cities evaluate two overarching questions:

1. **Impact evaluation:** to what extent has HUB-IN generated, or is expected to generate, significant positive or negative, intended or unintended, higher-level benefitsⁱⁱ, across economic, environmental, social and cultural dimensions?
2. **Process evaluation:** prior to realising those impacts, to what extent is the Hub operating as intended and what lessons can be learned,ⁱⁱⁱ in terms of enabling co-creation, innovation and entrepreneurship?

While the relevant indicators will differ from city to city based on their defined intervention, the framework includes a handful of common metrics and discusses potential data sources for quantifying and qualifying their impacts. The Grant Agreement sets out four overarching expected impacts common to all HUB-IN cities, summarised here:

1. Reversing trends of abandonment and neglect of historic heritage in urban areas and landscapes
2. New and tested blueprints for the socially and economically viable regeneration of European HUAs and cultural landscapes, with enhanced well-being and quality of life, social cohesion and integration
3. Boosted heritage- and culture-relevant innovation, creativity, entrepreneurship and light 'reindustrialisation' of HUAs and cultural landscapes
4. Cross-sector collaboration, creation of job opportunities and skills in cultural and creative sectors and innovative manufacturing linked to historic heritage

In addition, each city will define its own intervention via the Roadmaps and Action Plans, building on the assessment of the challenges in their HUAs as conducted in their previous work ("Current Landscapes") and identifying their vision, objectives, stakeholders, missions and actions to accomplish them. Each mission and set of actions will address the previously defined HUB-IN Clusters and the Ingredients and Cultural and Institutional Arrangements of a HUB-IN Place. Thus from the four overarching expected impacts

ⁱⁱ This is based on the definition of impacts as proposed by the OECD/DAC Network on Development Evaluation.³

ⁱⁱⁱ This is based on the definition of process evaluations as proposed by HM Treasury's Magenta Book on evaluations.⁴

come a set of common indicators (for all cities) and from the more detailed and city-specific interventions come a set of bespoke indicators, unique to each city.

The framework has been written with inputs from and discussions with the other work packages, and will be followed by four further Work Package 5 deliverables that deepen, apply and leverage its content:

- D5.2 “Adapted monitoring methodology to each pilot city”
- D5.3 “Quarterly evaluation reports”
- D5.4 “Final economic, social and environmental appraisal lessons learned”
- D5.5 “Guidebook for cities”

1.1.2 Scope

Other EU and non-EU cultural heritage programme reports have different objectives, scope and activities to HUB-IN, so it is important to note several elements that are not within the scope of this project’s Common Impact Assessment Framework:

- **Setting out the rationale for the project itself** – e.g. the importance of cultural heritage regeneration. Instead it is intended as a practical resource for monitoring.
- **Monitoring the project itself** – e.g. how many partner cities join the HUB-IN Alliance etc. Instead it is focussed on city level monitoring of their HUB-IN interventions.
- **Assessing the actual total value of all cultural heritage within cities** – e.g. quantifying in € terms the total economic and intrinsic value of a HUA’s heritage
- **Conducting place-making diagnostics and / or intervention design** – e.g. diagnosing the HUA’s challenges, designing initiatives, or proposing decision-making tools for managing a portfolio of interventions. These are addressed in other deliverables.^{iv}
- **Conducting “ex ante” (pre-intervention) forecasts** – e.g. forecasting in quantitative terms the expected benefits from future, hypothetical interventions. This framework assists cities in monitoring benefits during and “ex post” (after) their selected interventions.
- **Providing impact assessment tools for individual entrepreneurs.** Instead it is a resource for the city teams assessing their overarching HUB-IN intervention.
- **Conducting more advanced statistical analysis** – e.g. correlation coefficients analysis on survey results, ANOVA tests etc. Instead it proposes a framework that balances depth of insight with ease of use for city teams who may not be experts in economic, environmental or social sciences.
- **Guiding on comprehensive (Social) Return on Investment analysis** against the HUB-IN investment – e.g. assessing every single benefit against every single cost, as this is not practical for this type of intervention and the city effort available.

As referenced above in section 1.1.1 “Purpose”, the common impact assessment framework provides a basis for process and impact evaluation of the cities’ HUB-IN interventions that arise from their Roadmaps, including the common expected impacts in the grant agreement and a set of bespoke indicators unique to each city.

^{iv} See HUB-IN D3.1 Cultural Landscapes, D3.5 Roadmaps and D2.6 Interactive Dialogue Tool

1.1.3 Audience

The Common Impact Assessment Framework is directed primarily at:

Pilot city teams	The pilot city officials representing their city on HUB-IN. The framework provides the approach and indicators to monitor the success of their HUB-IN intervention, as defined in their unique Roadmaps and Action Plans. As there is already a large amount of existing support, resources, frameworks and guides available at entrepreneur level, this framework does not attempt to duplicate that and is aimed at the city team level.
Partner city teams	The partner city officials considering becoming a HUB-IN city. The framework indicates the types of success that can be monitored in a HUB-IN intervention.
Work package partners	<p>The work package partners on the HUB-IN consortium. The framework is a mechanism for work packages to propose indicators that are essential to their outputs and the project.</p> <p>It also indicates likely content from the city evaluation reports that might be leveraged for partner city recruitment, or communication and dissemination plans, or the HUB-IN toolkit etc.</p>

Whilst the framework is not written for the parties below, it may indirectly benefit:

Community residents	The pilot and partner city HUA communities. Whilst it is not considered likely that community residents will search for this framework, it will be published in the toolkit and online, enabling any interested parties to understand how the HUB-IN evaluation has been conducted in their HUA. This supports the principle of transparency.
Funders and investors	Public sector funders or private sector financiers considering offering grants or investments, who may wish to understand the methods behind the city team evaluations in support of transparency and trust.

1.1.4 Companion documents

This document can be read alongside other HUB-IN documents which provided some context or inputs to it, alongside recurring Work Package discussions:



The Common Impact Assessment Framework is also dependent on the more granular and city-specific content within upcoming HUB-IN deliverables D3.5 “Eight Tailored Roadmaps” and D4.2 “Eight HUB-IN Action Plans” and to some extent the WP4 task to define their infrastructure (answering the question for each city “what is a HUB?”). As such, the framework represents currently available knowledge which may evolve after the framework is published – thus the project is currently considering to what extent this deliverable may remain “open”, be refreshed or revisited as new information comes to light.

1.1.5 Structure

The document follows a logical structure, starting broad on general impact assessment practices and tailoring them step-by-step to the HUB-IN and city specifics:

Chapter 1: Introduction

This chapter briefly introduces the reader to the HUB-IN project and the Common Impact Assessment Framework's role within it. It summarises key parts of HUB-IN's vision and objectives, and of this document such as its audience and how they may use it.

Chapter 2: Research approach

This chapter sets out the approach taken in forming the Common Impact Assessment Framework for HUB-IN, including details on desk research, Work Package inputs, webinars and the relevance of the project KPIs set out in the Grant Agreement.

Chapter 3: Impact assessment on HUB-IN

This chapter sets out the findings of the desk research in order to link general good practice in impact assessment with the unique aspects of HUB-IN. It sets out a model for understanding and communicating "what HUB-IN is", as a basis for what cities may monitor.

The chapter further explores important considerations such as leakage and displacement effects, additionality and attribution. Also included are key principles such as transparency, ethics of data collection, proportionality, practicality and more.

Chapter 4: Indicators

This chapter sets out relevant indicators, as gathered from the research identified in Chapter 2. It includes process and impact indicators, aligned with the Chapter 3 HUB-IN model. This includes quantitative, qualitative, objective and subjective indicators.

Chapter 5: Tailoring indicators to each City

This chapter acknowledges the breadth of what HUB-IN proposes cities *could* do, and proposes the approach for prioritising monitoring according to what they *will* do. This is an approach for tailoring indicators and data collection/analysis/interpretation/reporting.

Chapter 6: Leveraging Impact Assessment across HUB-IN

This chapter adheres to the principle of continual improvement, by setting out how the results of monitoring and evaluation can be leveraged in reporting, lessons learned, and future guidance for Alliance cities (D5.4 Overall Appraisal and D5.5 Guidebook).

Bibliography

Government resources, academic journals, grey literature etc.

Appendices

Glossary of terms, lists of indicators, step-by-step data collection guides for cities.

2 Research approach

This chapter sets out the approach taken in forming the monitoring and evaluation approach for HUB-IN, including details on desk research, discussions and inputs, and the relevance of the project KPIs set out in the Grant Agreement.

2.1 Methodology

HUB-IN takes place within an international and EU policy environment that increasingly recognises the value of cultural heritage in regeneration, academia that seeks to expand this recognition further in journals and literature, and EU and non-EU programmes that apply this recognition in the real-world.

- 1. Conduct desk research**

Given the above, a starting point for defining the HUB-IN monitoring and evaluation approach was desk research to leverage existing findings on related indicators, impact assessment approaches and considerations such as risks and lessons learned. Additional thinking was sought from relevant cultural heritage webinars, including with HUB-IN's Sister Projects ([CENTRINNO](#), [T-FACTOR](#)). N.B. given the resourcing available and to avoid "reinventing the wheel" of what other programmes have already achieved, this was not scoped as a deep literature review or meta-analysis, but rather as a high level desk research exercise to draw relevant findings in a time-effective way.

- 2. Leverage existing tools**

The above findings were built on top of Connected Places Catapult's in-house Performance-In-Use toolkit, a bespoke impact assessment tool developed specifically for urban innovations that involve unproven technologies or creative business models. The toolkit is based on Theory of Change and tried-and-tested governmental approaches for economic, environmental and social assessment.

- 3. Test the Theory of Change for HUB-IN**

The next stage was to pin-point the Theory of Change for HUB-IN: how it intends to create change in practical and specific terms. This was formed naturally as the project progressed deliverables and gave shape to its Framework etc, as well as through consultations with Work Packages on their inputs and considerations.

- 4. Consult pilot cities**

Workshops were held with the Pilot cities from June 2021 in order to test and refine their objectives, and thus relevant indicators and approaches. Whilst it was later revealed to be too early to do this, it supplied useful information on the pilot city visions for what difference HUB-IN is expected to bring to their HUA.

- 5. Consult Work Packages**

As above, consultations were held with HUB-IN Work Packages on inputs and considerations related to their deliverables and areas of expertise.

- 6. Filter Grant Agreement KPIs**

The Grant Agreement further specified some project KPIs. Not all are relevant to city-level monitoring, and so will not be applicable for the city monitoring and evaluation considered in this Common Impact Assessment Framework. This is discussed in Section 9.10 below.

- 7. Consolidate the above for prioritisation and communication**

A final consolidation activity brought together the above into this impact framework, as can be seen in Figure 1 below. The list of possible indicators presented here will need to be prioritised by the pilot cities into a short list as they evolve the details of their unique interventions in their Roadmaps and Action Plans.

The list of literature sources referenced (international, governmental, academic and programme) can be found in Chapter 8 “Bibliography”.

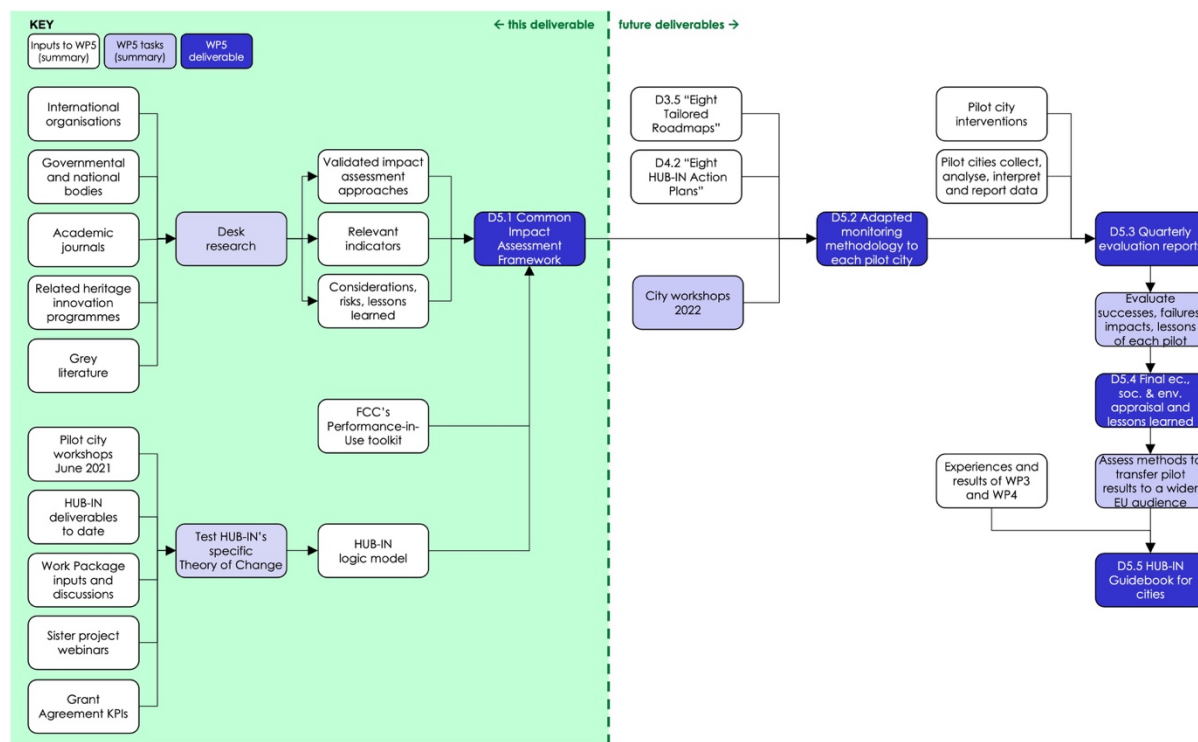


Figure 1: a summary of the Monitoring and Evaluation approach on HUB-IN.

In terms of WP5 deliverables and how they adapt to the current in-development status of the project, the first is to start with a solid foundation of good practice and what is ideally possible to assess within the cities for HUB-IN’s ambitions, as written in the D5.1 Common Impact Assessment Framework.

Next, once the cities have defined their Roadmaps and Action Plans for their specific vision, objectives and initiatives, then the impact assessment framework can be tailored to each city. Workshops will be held with each city – these will inform what is possible for each individual city to assess given where they are in their development and guide the production of a tailored approach that will form the content of D5.2 “Adapted monitoring methodology to each pilot city”.

D5.2 will in turn enable cities to produce quarterly evaluation reports (D5.3) based on the city teams’ collection, analysis, interpretation and reporting of data from their interventions. This includes capturing findings on what is working well and what is not working so well, so that lessons can be learned on how impact assessment is affected by the constraints and realities within the cities. By cities identifying where they are falling short of their intended findings, this indicates areas for potential mitigation and if more resource or focus etc is needed. The above approach is taken because if, in contrast, D5.1 was softened or cut in order to better meet the reality of where the cities are at the time of writing in developing their HUB-IN plans, then that could limit the ability to conduct lessons learned or upskill. In complex projects such as HUB-IN, having a process to initiate discussion and uncover the story can be as important as “finding the right answer”.

Finally, those quarterly reports will feed into a consolidated and overall “Final economic, social and environmental appraisal and lessons learned” (D5.4) and – along with the sharing of experiences from Work Package 3 (“Co-design and create the HUB-IN concept”) and Work Package 4 (“Pilots implementation and concept validation”) – a HUB-IN Guidebook for cities (D5.5).

2.2 Terminology

Key impact assessment terms used in this document are set out below in Table 1:

appraisal	A forward-looking assessment of an intervention's potential benefits and disbenefits, often as part of decision-making and portfolio management.
counterfactual	The view of what would have happened anyway, in the absence of the intervention, used for comparing with the intervention's results.
evaluation	A backwards-looking assessment of an actual intervention's benefits and disbenefits.
ex ante	See Appraisal
ex post	See Evaluation
impact	<p>A longer term consequence, often driven more indirectly by the intervention and subject to numerous other causes. Impacts can be intended or unintended, positive or negative.</p> <p><i>Examples could include increased employment and economic growth, improved quality of life for residents etc.</i></p>
intervention	A policy, programme or project that intends to effect change. On HUB-IN, this is defined for each city as they develop their Roadmaps and Action Plans which specify what change they intend to make, and how, in practical tangible terms.
outcome	<p>A short- or medium-term consequence, often driven directly by the intervention's outputs and measurable within project timeframes. Outcomes can be intended or unintended, positive or negative.</p> <p><i>Examples could include changes in business maturity, employee skills, citizen awareness and behaviours etc.</i></p>
output	<p>The direct products or services delivered, or participation generated by the intervention.</p> <p><i>Examples could include the number of training workshops delivered, the number of cycling facilities built, the number of downloads of an entrepreneurial app etc.</i></p>

Table 1: key impact assessment terms used in this document

3 Impact assessment on HUB-IN

This chapter sets out the findings of the desk research in order to link general good practice in impact assessment with the unique aspects of HUB-IN. It sets out a model for understanding and communicating “what HUB-IN is”, as a basis for what cities may monitor. The chapter further explores important considerations such as leakage and displacement effects, additionality and attribution. Also included are key principles such as transparency, ethics of data collection, proportionality, practicality and more.

3.1 General good practice

Findings from the desk research, previous in-house and external toolkits and programmes reveal and validate some good practices in impact assessment in general:

A clearly defined intervention is paramount in appropriately and effectively allocating monitoring effort. Without a clear set of defined objectives, intervention owners will be less able to identify and prioritise the various options available to them, and risk setting themselves weak or irrelevant evaluation questions. The rationale should explain how intended changes in outcomes will be produced by the proposed delivery model.²

An intervention’s evaluation may assess process, impact or “value-for-money”.

- *Process evaluations* assess the mode of delivery: they examine the intervention’s activities and change pathways, asking what lessons can be learned. This can include the OECD’s standard evaluation criteria³ of relevance (the extent to which the intervention design responds to beneficiaries’ and partners’ priorities), coherence (compatibility with other interventions in the HUA), and effectiveness (progress towards objectives along the results chain / causal pathway).
- *Impact evaluations* assess the “so what?”: they examine the changes that the intervention has caused, asking what value has been added (or subtracted) and for whom. Included in here can be the OECD evaluation criteria of impact (the extent of positive and negative, primary and secondary long-term effects), and sustainability (the extent to which the net benefits of the intervention are expected to continue).³
- *Value-for-money evaluations* assess the cost-effectiveness of the intervention: they examine whether the benefits outweighed the costs, and thus whether the intervention was justified. Included in here can be the OECD evaluation criterion of efficiency (the extent to which the intervention delivers results in an economic and timely way).³

For a comprehensive understanding of whether an intervention met success, how, why, for whom, and at what cost, all three types of evaluation might be considered⁴ but N.B. crucial points below about effort and proportionality.

An intervention may require assessment before, during or after the intervention. Each of these play different roles: the “before” (“ex ante”) assessment is a forward-looking appraisal, aiming to forecast potential impacts, possibly in monetised or quantified terms, to justify expenditure. The “during” assessment is an in-progress checkpoint on progress to date, including lessons learned that can inform any adjustments needed. The “after” (“ex post”) assessment is a backwards looking evaluation of the changes caused by the intervention, often comparing against a baseline or pre-intervention trend and often to help inform better funding decisions in the future.

Benefits can be categorised as monetisable, quantifiable, qualitative. It is not the case that some are “better” than the others: they each play a distinct role and suit different requirements (and audiences). An active mobility initiative that leads to changes in air quality for example can have monetisable benefits in terms of social value (reduced absenteeism from illness, reduced costs to health services, etc),⁵ quantifiable benefits in terms of the “part per million” concentration of each named air pollutant, and qualitative benefits in the subjective and aesthetic benefits perceived by communities. Those three examples also happen to fit into economic, environmental and social categories respectively.

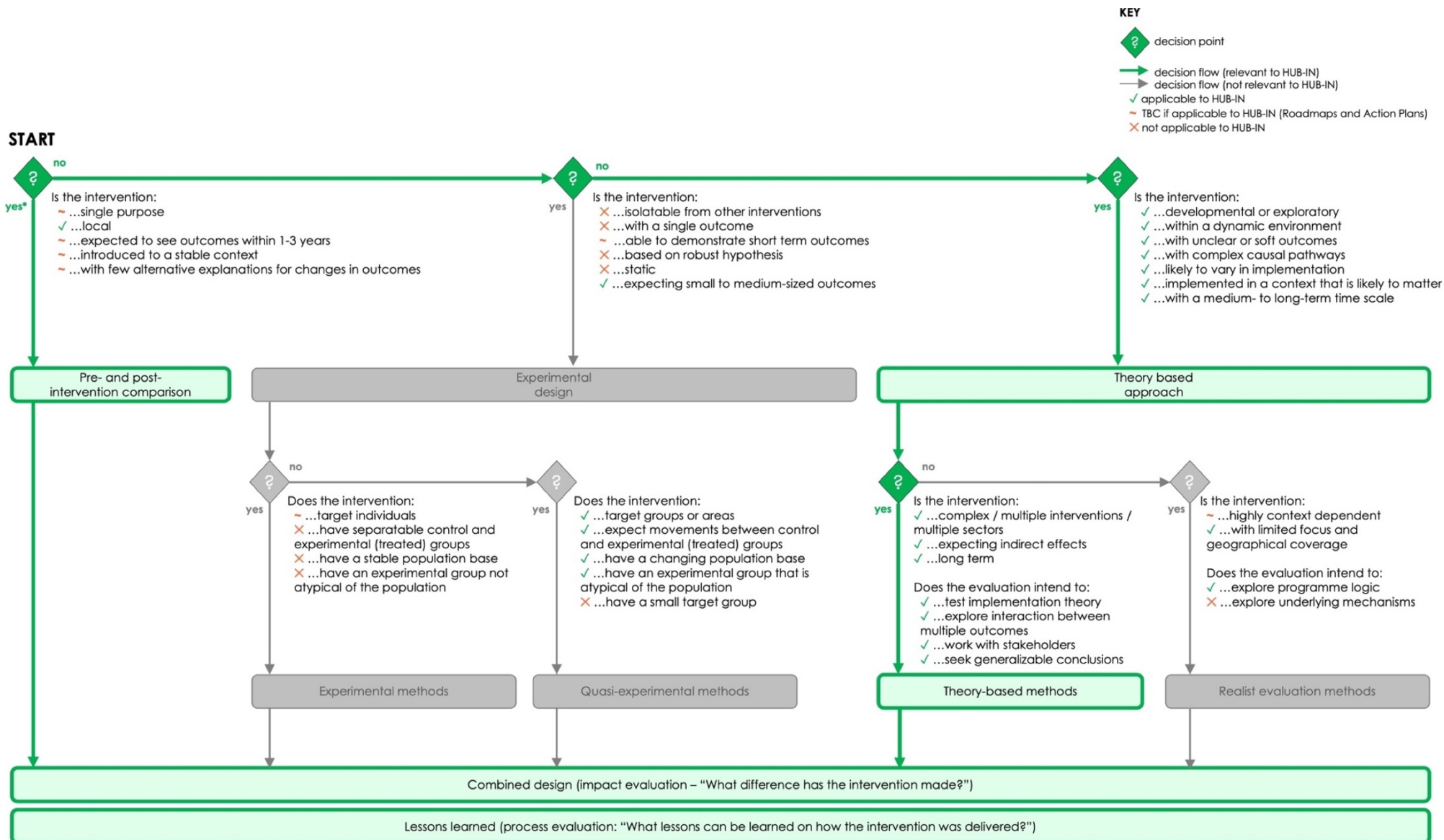
As a further distinction, benefits can be objective or subjective.⁶ These are often confused with quantitative and qualitative respectively, but they are distinct. Quantitative measures can be counted or given a number (measures quantities). Qualitative measures can be described in language (measures qualities). Objective measures are based on verifiable real-world observations. Subjective measures are based on personal perceptions, feelings and opinions. An example of a quantitative yet subjective measure may be communities scoring their sense of place on a scale of 1-5 – results can be aggregated, analysed for trends, averages, variance etc (quantitative), yet they remain based on the respondents’ own perceptions and opinions (subjective).

The most robust impact evaluations – (quasi) experimental – require strict conditions that may be unrealistic in real-world city interventions. Specifically they require that the intervention is isolated from others in order to remove the “noise” of other changes. These approaches include randomised control trials, time series trend analysis and others. However, cities are often receiving national, regional or local investment programmes, public and private sector collaborations, global trends and general community changes that make it difficult to credibly isolate an intervention such as HUB-IN from the flows of networks and trends that will occur around, through and within it. Given the importance of these external factors, it may be that the intended impacts of the HUB-IN pilot need flexibility to evolve over time, in order to remain relevant and coherent with emerging needs, changes and trends. Large, costly experiments (possibly also involving ethical issues) may otherwise measure impacts that become less relevant over time, unable to adapt to new measurements that become important for the project. Similarly, there may be positive and negative externalities that Hub managers need to stay open to.

Thus, Theory of Change is an oft-used driving force in scoping an impact evaluation.⁷ Existing evidence on the rationale, delivery model and objectives can be synthesised into a summary, illustrating how the intervention is expected to drive change, for who, why and over what time horizons.⁸ Establishing the logical flow between those points allows assumptions to be tested, modifications to be implemented, evaluation needs to be identified and a relevant data collection plan to be formed. This approach is especially useful in interventions with long-term outcomes and complex or indirect causal mechanisms, and has underpinned numerous EU and non-EU heritage and innovation projects such as CLIC, Coventry City of Culture 2019-2024, Hull City of Culture 2017, Open Heritage, ROCK (2019), Social Platform for Holistic Heritage Impact Assessment (SoPHIA), SynchroniCity (H2020), etc. See Figure 2 below for a decision pathway on using Theory of Change for HUB-IN.

Realist evaluation methods can play a more explorative role in impact evaluations. These methods are suited to interventions where results are expected to have high variation when applied in different contexts and where the focus is on *understanding* the mechanism of change rather than *measuring*, i.e. it is not entirely understood how, why and where the intervention will work. The researchers will form hypotheses on which contextual components affect how, and for which groups, an intervention will work. Data is then collected about those components and observations formed on their mechanisms of change.^{9 10}

Evaluation effort should be allocated based on principles of proportionality. Whilst it is recommended to design an evaluation approach that maximises the accuracy of the assessment, it is important for any assessment effort to be proportionate to its resource constraints and budget.^{11 12} Thus, grounded and reality-driven choices need to be made between the full suite of process / impact / value-for-money / before / during / after / monetisable / quantitative / qualitative / experimental / realist / etc / assessment options as outlined above. Here, a clear vision and delivery model are crucial, requiring enough certainty and definition to guide the prioritisation of (and commitment to) areas for expending monitoring resource.



*Pre- and post-intervention evaluations may be relevant – they are TBC depending on the upcoming city-specific Roadmaps and Action Plans in each city and the level of granularity to be assessed.

Figure 2: decision-making criteria and results for an appropriate evaluation approach, as applied to HUB-IN. Based on HM Treasury and Public Health England.⁴

3.2 Cultural heritage findings

As referenced in Chapter 2 “Research approach” above, HUB-IN takes place within an international and EU policy environment that increasingly recognises the value of cultural heritage in regeneration, academia that seeks to expand this recognition further in journals and literature, and EU and non-EU programmes that apply this recognition in the real-world. Whilst a meta-analysis or other deep literature review is not in scope for this document, a summary of key relevant findings are presented below. In the next chapter they will be consolidated with HUB-IN’s unique model of change.

Cultural heritage impacts at macro, meso and micro levels, making it a key contributor to Europe’s regions, cities, towns and rural areas in terms of attracting inward investment, business and talent, and developing cultural creative quarters — thereby enhancing regional competitiveness both within Europe and globally.¹³ A detailed investigation of these levels can be found in the Cultural Heritage Counts for Europe report, and the related role that cultural heritage plays at global, European, national, regional, local and site levels.¹³

Those levels see impacts in economic, environmental, social and cultural dimensions.

Policy and academic literature have a history of recognising the inadequacy of cultural heritage programmes that assessed cultural change purely as a subset of economic value. It is indeed understandable in economic terms, being a “common good” (available to all in layman’s terms) and with values that can be monetised, yet there are much more indirect and intrinsic values to cultural heritage that it warrants consideration as its own dimension. Despite this recognition, there remains a gap between theory and practice: ~40% of studies have been found to only assess one dimension and only 1 in 20 study all four, illustrating a vast room for improvement in holistic evaluations.¹³ Whilst diverging views continue on the precise relationship of the cultural dimension to the other three, it is a commonly recognised necessity in heritage evaluations. See Figure 3 for a summary illustration.

Culture’s value goes well beyond pure market transactions – it extends to the benefits generated from its indirect services functioning as the “glue” of a place that holds relationships and meanings together; from its intrinsic values for current and future generations knowing that it exists; and from its value on its own, amongst other benefits. For decades, models such as Total Economic Value and more recently Complex Social Value have explored frameworks for a more holistic measurement of environment and culture that can account for the more indirect, social and multi-generational values that cultural assets can unlock.^{13 14}

Rebalancing power dynamics by including under-represented groups is key in terms of the relevance of an intervention.¹⁵ Under-represented groups may be considered along terms of gender, disability, ethnicity, sexuality, social class and more. At an extreme, under-represented groups may be marginalised – i.e. excluded from services or participation in political, economic, social or cultural aspects of the location. Any rebalancing of power dynamics will likely face divergent and possibly conflicting needs, desires, priorities – trade-offs may need considered, and important questions raised on who gets to decide on those trade-offs.

Programmes with diverse pilots offer a broad “menu” of indicators for cities to select from according to their interventions’ details and requirements. EU cultural heritage project Sophia (“Social Platform for Holistic Heritage Impact Assessment”) developed an assessment model built around 9 themes (Prosperity, Protection, Attractiveness etc) which together broke down into a subset of more than 50 indicators (e.g. Prosperity → Employment, Real Estate Value, Tourism, ..., etc).¹⁶ The H2020 project ROCK

(“Regeneration and Optimisation of Cultural heritage in creative and Knowledge cities”) model proposed more than 20 themes, each splitting into more detailed indicators.¹⁷ CLIC (“Circular models Leveraging Investments in Cultural heritage adaptive reuse”) undertook a rigorous process to propose indicators bundled by generative, regenerative and symbiotic capacity.^{14 18} More targeted programmes, such as Hull City of Culture 2019-2024 also established a long list (84) of indicators to draw from.¹⁹ In general, these lists of indicators are formed following a Theory of Change logic model as referenced above, charting the link between resources, inputs and activities and the expected benefit flows.

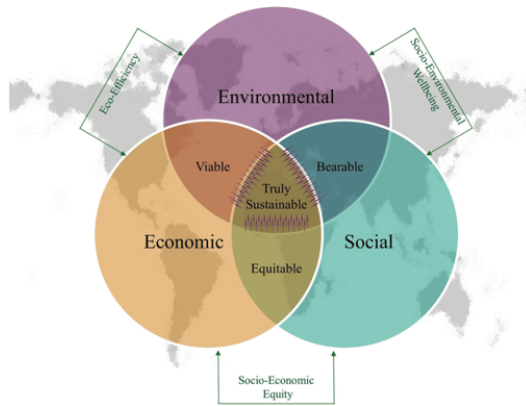
Intervention complexity can force a focus on evaluating contribution, not attribution.

Attribution refers to the establishment of a causal link between an intervention’s activities and its observed change – it evaluates whether / the extent to which observed change was in fact due to the intervention. Contribution on the other hand, recognises that the observed change may be driven by numerous other causal factors – it evaluates how the intervention has *helped* to cause the observed changes and is less reliant on a proven counterfactual (“what would have happened anyway without the intervention”).²⁰

Intervention complexity can also pose significant challenges to an effective, accurate and meaningful evaluation. Every city is unique in terms of its cultural assets and the foundational enablers that support the public and private sectors in unlocking the value inherent within tangible and intangible culture – i.e. a city’s cultural capital. And within those cities a vast range of intervention options present themselves. Unless the cultural heritage project is tightly scoped, it may find itself needing to provide a wide and excessive range of indicators to cater for the diverse intervention options. The H2020 project SoPHIA has acknowledged in a 2021 webinar that its challenge of how to measure the success of a heritage intervention is an ambitious goal, fraught with complexity that can be overwhelming for the pilots. This gives rise to a difficult balancing act between simplicity and full assessment, as full assessments can be very time and resource intensive. The H2020 project OpenHeritage made a significant learning that from the outset it suffered from issues in data availability and heterogeneousness – the data was disjointed enough to limit the analysis that could be carried out, and the ability to draw comparisons and findings. Important root causes were differences between the cases considered, in terms of their different contexts and development stages.

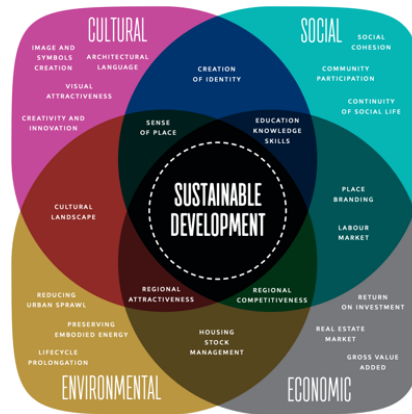
This is highly relevant to WP5’s previously raised risks on the variance in pilot city status of intervention definition and maturity, and how this may affect their readiness for a tailored monitoring and evaluation plan, including risks to the resultant data collection and baselining. The authors acknowledge the project’s response that the Common Impact Assessment Framework may thus best remain an open document to be iterated as the project evolves, but also note the consequential risks on effort, clarity, expectation management with cities, and approach. An important mitigation here is the inclusion into the monitoring plan of a recurring focus group of local stakeholders that can appreciate both the context-specific elements of their intervention and the local changes that happen over time, in order to feed into adaptation measures. Further commentary on these risks can be found in Chapter 7 below.

Indicative snapshot of the consideration of economic, environmental, social and cultural dimensions in sustainable development



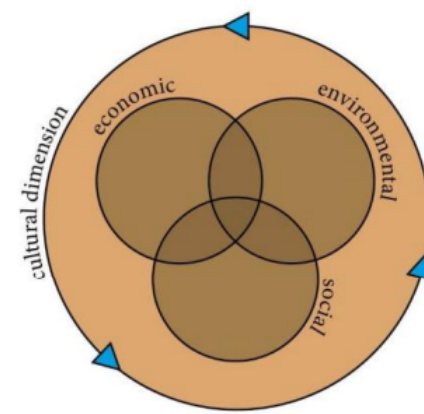
Sustainable development considered as the focal point of “three pillars”: economic, environmental and social...

Indicative illustration from Tasdemir et al.²¹



...movement beyond the “three pillars” to include the cultural dimension...

Indicative illustration from Cultural Heritage Counts for Europe report¹³



...movement towards culture “as” sustainable development – seen as an encompassing and foundational value driver.

Indicative illustration from CLIC Project¹⁴, adapted from Dessein et al.²²

Figure 3: a snapshot indication of various approaches to sustainable development, including the treatment of the cultural dimension and its relation to the “three pillars” of economic, environmental and social dimensions.

3.3 The unique HUB-IN model

i) The problem

The project recognises key trends important to heritage. Firstly, that Europe’s unique cultural heritage is at risk of irreversible loss from the economic decline and social exclusion being faced in historic urban areas, whether from global trends or historic local frictions. Secondly, that Europe’s policy makers and municipalities have increasing appetite to recognise and unlock the value within cultural heritage^v as a contributor to thriving economies, engaged communities and resilient environments – yet are held back by a lack of proven development frameworks, tools and knowledge sharing.

The project has articulated in overall terms the general challenges that cultural heritage- and innovation-led regeneration projects often face, as shown in Figure 4:

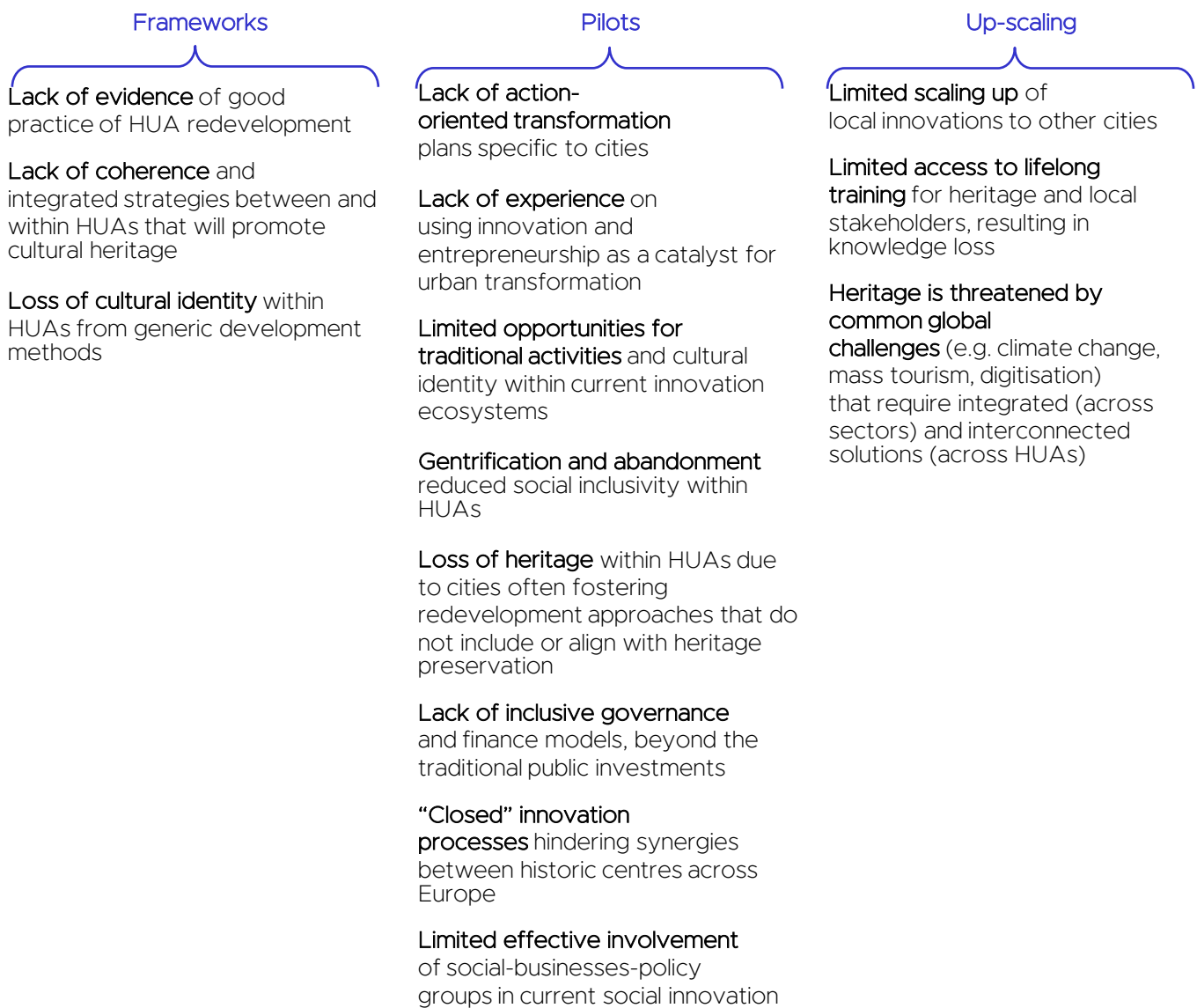


Figure 4: the specific challenges in cultural heritage- and innovation-led HUA regeneration that HUB-IN exists to address

^v See (Smith, 2021)¹ for more information on HUB-IN's Alignment with European and International Policy.

ii) The proposed solution

HUB-IN's contribution to the regeneration of HUAs is in establishing Hubs of innovation and entrepreneurship that leverage the cultural capital of that HUAs heritage, and to transfer ideas and results within and between cities. Through this it expects to create sustainable business, including new business models; improve living and mobility conditions; increase resource resilience and social resilience; and ultimately contribute to reversing trends of abandonment and neglect of historic heritage in cities:

HUB-IN considers the term “cultural heritage” in the broad sense, covering tangible and intangible values, exploring its ecological, economic, and social dimensions. Readers may view the [HUB-IN Framework](#) for a full explanation of the project and a glossary of terms. Key elements are outlined below.

Hubs

The exact nature of a Hub is still being defined (Task 4.2.1 “Establishing the digital and physical Hub's infrastructure”) at the time of writing – some pilot cities may have a building that operates as a physical destination and “glue” for their co-creations, some may have online services or set of activities. The project notes that the components of each Hub will be variable according to how they define their specific purposes, structure and goals – they may be anchored in existing nodes from their local urban innovation ecosystem or have a more flexible and temporary physical infrastructure that could vary according to the programme of activities to be implemented.

In the early stages of the project a working definition of ‘Hubs of Innovation’ was proposed as a starting point to be reviewed and developed as the project progresses. In this definition, ‘Hubs of Innovation’ should:^{vi}

- Facilitate interaction between its members
- Be located within and / or focus on the sustainable regeneration of an historic urban area, building on its attributes to support and inspire productive change
- Demonstrate community engagement through embedded co-creation practices acting as a catalyst for social inclusion, diversity and wellbeing
- Be incubators for job creation through innovation and creativity thereby accelerating innovation and entrepreneurship led sustainable regeneration and transformation
- Focus on circularity development models (upcycle, reuse and rethink) and favour ‘open’ innovation and bottom up place based approaches
- operate as a potential focal point for multi-agency co-ordination

Tools and enablers

Thus, regardless of physical or digital structure, the Hubs will need to be managed in a way that unlocks the value of cultural heritage over time. A suite of tools and enablers are proposed by the project to assist cities in this journey, including:

- Evidence gathering tools (Atlas, GeoTool etc)
- Implementation tools (Roadmaps, Action Plans, Toolkit etc)
- Social inclusion tools (Interactive Dialogue Tool, Digital Space etc)
- Entrepreneurship tools (Business and Finance Model Catalogue, Accelerator etc)
- Upscaling tools (Academy, Alliance etc)
- and more (Match & Ignite programme, “Modular Implementation Packages” etc)

^{vi} Extracted from HUB-IN Glossary.

“Activity Clusters of Innovation”

As per the [HUB-IN Framework](#), HUB-IN innovation will be delivered through the development of Activity Clusters of Innovation, with a common goal of economic prosperity, new ways of sustainable life, and new ecological standards for Historic Urban Areas. The creation of Clusters of Innovation in these sites is a way to unlock the potential contained in their cultural wealth and heritage value.

Each pilot city will address thematic areas within one or more Clusters, to be outlined in the upcoming Roadmaps and further specified in the upcoming Action Plans. These Clusters and thematic areas are:

Cluster 1: Culture and Creative Industries

Innovative products and services

- Multimedia: digital animation, video gaming, film broadcasting
- Design and Fashion: tangible and intangible cultural heritage, sustainable and circular businesses, digital fabrication, open spaces for innovation, festivals, music, literature, arts

Adaptive reuse of traditional skills

- Traditional food: gastronomy and beverages
- Craft industry: wood crafting, design showcasing, textile and stone carving, ceramics
- Entertainment / festivals: music, dance events, traditional festivities
- Traditional and historic local commerce.

Cultural and creative tourism

- Tourism focused on user unique experiences
- Creative work combining business and leisure
- Tourism and social connectivity
- Destinations as hubs of creative networks

Cluster 2: New Lifestyles

Consumption and prosumption

- Cultural services for diverse and inclusive cities
- Circular consumption patterns
- Local energy communities
- Local and sustainable food
- Sharing economy

Living and mobility

- Inter-generational co-living models
- Public spaces for people: culture, beauty, sustainability
- Sustainable mobility and accessibility solutions
- Sustainable and active mobility
- Urban poverty mitigation
- Shared mobility solutions
- Micro-logistic solutions
- Green buildings
- Zero emission zones

Health and wellbeing

- Inclusion of migrants and refugees
- Communities' wellbeing, sustainable tourism
- Nature-based solutions for healthier HUAs
- Public spaces driving health and happiness
- Cultural memory as a component of wellbeing, sense of place, identity, place purpose

Cluster 3: Resilient & Human Connected Places

Environmental balance

- Climate resilience (adaptation and mitigation)
- Energy transition in HUAs
- Sustainable food & local food production
- Adaptive reuse for circular cities
- Nature-based solutions
- Resource efficiency
- Ecosystem services

Empowering communities

- Participatory processes
- Migrant integration and equity
- Local economy
- Social cohesion

Livable and connected places

- Urban design and public space
- Reuse of spaces and buildings
- Smart cities & neighbourhoods
- Historical and cultural requalification
- Sense of place / place purpose
- Digitalisation
- Immersive technology
- Urban regeneration
- Data science

Figure 5: HUB-IN's three “Clusters of Innovation” and the thematic areas within them

iii) The expected outcomes

For evaluation to be relevant, meaningful and effective, it must be based on a clearly designed intervention, in line with other EU and non-EU heritage programmes set out in the Methodology section above. The Theory of Change is used to test the logic of how HUB-IN plans to convert its intentions into results – i.e. how it expects to specifically drive change.

This unlocks the ability to identify suitable indicators for monitoring. A key component of this is a logic model, a visual one-pager setting out the logical links between the project components, illustrated below:

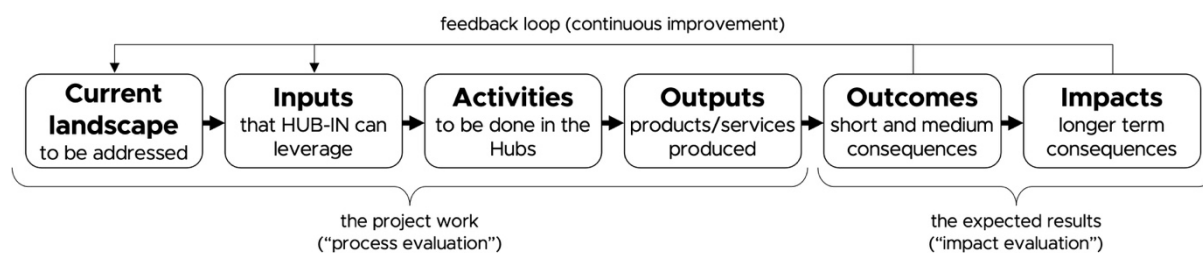


Figure 6: key components of a logic map

Each component is explained below, backcasting from the intended impacts. Due to HUB-IN's focus on developing a co-creative, entrepreneurial ecosystem in order to leverage the cultural heritage, additional components are added in purple text:

- **impacts** expected over the longer term, such as the economic regeneration of the HUA. Impacts are often longer term contributions, with only indirect links, and often expected after the project's timelines
- **outcomes** expected over the shorter-term that will lead to those impacts above, such as increases in tourist footfall. Outcomes often have a direct link to the intervention and often expected to be measurable during project timelines
- **outputs** that the Hubs will produce in order to drive those outcomes above, such as their Roadmap Missions and Actions
- **activities** necessary to deliver those outputs. For HUB-IN this splits into:
 - **Hub co-creation**, whereby inclusive innovation is fostered across public, private, academic and community groups.
 - **Hub management** which includes the central role of the city teams in orienting, governing and sustaining their intervention.
- **inputs** to those activities. For HUB-IN this splits into:
 - **entrepreneurial ecosystem** elements that constitute "a HUB-IN place" and are foundational enablers of entrepreneurship. These are the "Ingredients" and "Cultural and Institutional Arrangements" per the HUB-IN Framework.
 - **cultural capital** that constitutes the value driver of HUB-IN's innovation and entrepreneurship, and the heritage needing preserved
- **current landscape challenges** of the HUA's, reflecting the challenges to be addressed by the HUB-IN intervention

See Figure 7 below for the high level project logic model.

HUB-IN

Expected Impacts

KEY
Short-term likely detectable within project timelines
Medium-term likely detectable after project timelines
Long-term likely detectable after project timelines (longer term)
OBJ# objective, per the Grant Agreement

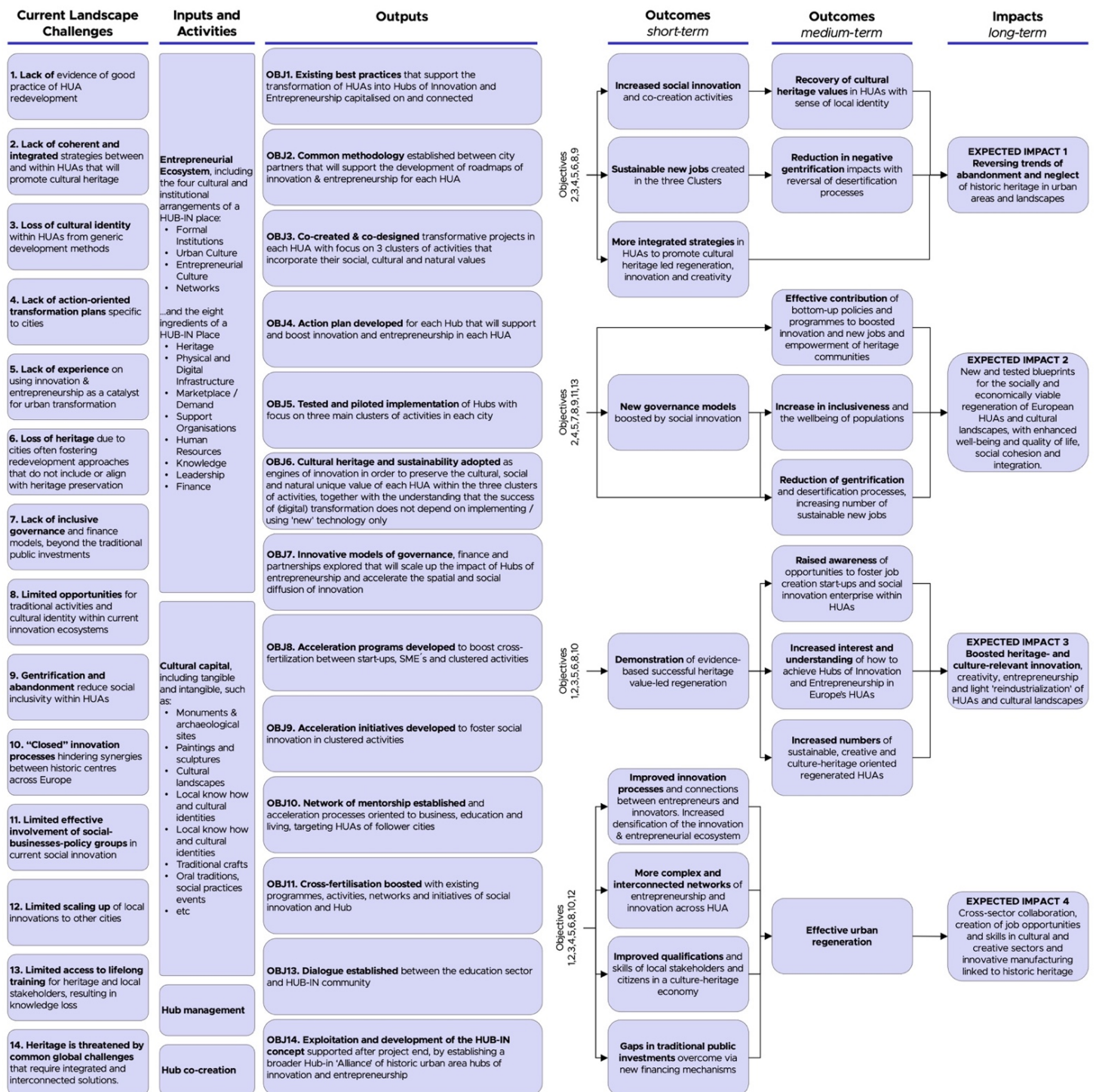


Figure 7: project logic model, illustrating the four key impacts that HUB-IN expects to drive (as per the Grant Agreement) and how. To reflect the current reality of the project, outcomes have been split into short-term (likely detectable within project timelines), and medium-term (likely detectable after project timelines). As part of the monitoring, city teams and key stakeholders assess progress at regular intervals and identify areas for continual improvement.

3.4 Principles for HUB-IN

A number of key principles underpin the structure and content of the impact framework:

1. **Practical:** there are many deep and thorough academic assessments on the value of culture to society and the role that cultural heritage plays as a form of capital. This framework does not seek to duplicate existing academic papers or literature reviews or remain at the theory level, but rather to present a practical framework: how HUB-IN delivers value; what monitoring questions apply; how those monitoring questions will be evaluated. In D5.2 “Adapted monitoring methodology to each pilot city”, each city receives more granular specifics unique to their intervention, i.e. data collection plans and evaluation techniques.
2. **Ethical:** a GDPR-compliant evaluation is a must. For example any surveys will need to be designed with privacy by default: avoidance of personal identifiers unless essential; where personal identifiers are needed then the respondent will be able to opt in and be aware of how they will be used; anonymisation of personal identifiers and, at the appropriate time, deletion of data. This will be in accordance with HUB-IN Data Management plan.
3. **Proportional:** the cities will need to make a balanced trade-off between the ideal of a completely holistic, granular assessment and the reality of effort available to them, data available to them, timelines etc. In terms of depth, this means recognising that the evaluations will be conducted by city teams who are not specialists in economics, environmental science, social science, statistics etc, and offering appropriate techniques. Thus the framework does not include techniques such as hedonic pricing, Social Return on Investment etc. In terms of breadth, this means that cities may select “up to 3” indicators per the Grant Agreement.
4. **Transparent:** the HUA communities are one of the beneficiaries of HUB-IN, and if there is public expenditure then the residents may also be part of the tax-payers funding it. Thus they already have two clear interests in understanding the success of the intervention and how that success was determined. Whilst it is not considered likely that residents will search for this framework, it will be made available by being published in the toolkit and online. In line with the Ethical principle above, any data collection should also (concisely) explain data management considerations.
5. **Leveraged:** i.e. makes use of existing work rather than seeking to “reinvent the wheel”. Thus, rather than duplicating a deep literature review or intensive cross-sector consultation processes, it refers to existing findings from reports and relevant programmes etc as outlined in Chapter 2 “Research approach” above.
6. **Leverageable:** the results of the pilot cities’ HUB-IN intervention will be a useful input to future partner cities in terms of ideation, transferability and learning from success and failures. The “Final economic, social and environmental appraisal and lessons learned” (D5.4) and “HUB-IN Guidebook for cities” (D5.5) will support this. This aligns with Cultural Heritage for Europe Counts report’s five strategic recommendations of supporting evidence-based policy making, measuring impact, monitoring trends, sharing and disseminating data and maximising impact.¹³
7. **Meso scale:** HUB-IN operates at various levels: in each pilot city there may (or may not) be an individual building for a physical Hub; individual events, festival and SME’s receiving support; networks of support organisations; incubators, communities and more. Thus HUB-IN is not operating at the macro (national scale), but a combination of micro (site level) and meso (network level / relationships between actors). It is this meso level that will have the most focus in the evaluations, written for the city teams and not for individual sites or SMEs.

3.5 Considerations for HUB-IN

3.5.1 Challenges on existing data

HUB-IN is targeted towards the specific geography of Historic Urban Areas, defined by the project as follows:

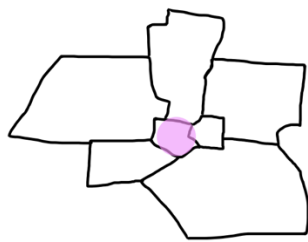
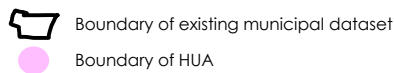
...defined urban areas that are result of the historic layering of cultural and natural values and attributes, extending beyond the notion of “historic centre” or “ensemble” to include the broader urban context and its geographical setting.²³

Historic Urban Areas do not exist in a vacuum and relate to both the tangible and intangible factors that shape the area’s character and identity. Within HUB-IN we consider three subcategories of HUA:

1. Historic areas which are, in whole or in part, town or city centres.
2. Historic areas which are outside of the town or city centre. These will typically be part of medium and larger towns and cities.
3. Historic areas that focus on the wider urban values that define the identity and character of the town, city, or place.

When conducting impact evaluations, municipal datasets are a reliable source for collecting data: they are often comprehensive (covering topics from employment rates, to education, to demographics, to tourism and more), reliable (being official data) and low effort (being publicly available without additional effort by the city team).

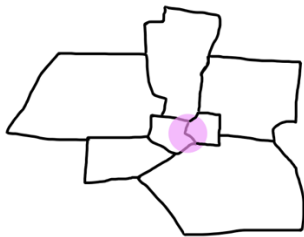
However, the geographical boundaries of HUAs are unlikely to align perfectly with the geographical boundaries of existing municipal data sets. They may face scenarios such as those illustrated in Figure 8 below.



Close match (ideal)

In this scenario the HUA aligns so closely with an existing municipal dataset that it can confidently be used as a proxy, reliably detecting changes in the HUA over time.

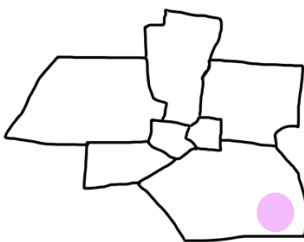
A full range of municipal data (such as demographics, employment data, tourism, residential land space etc) may thus be easily available to the city hub team at no extra effort.



Split or fragmented

In this scenario the HUA straddles multiple municipal dataset boundaries, limiting the extent to which each one can accurately reflect changes in the HUA.

Depending on the variation between the datasets and to what extent they cover the HUA, they may either be assumed to be “close enough” as a proxy on general HUA data, or not useable. This may rely on a careful evidence-based decision as the D5.2 (tailored methodologies) are written with the cities.



Subsumed

In this scenario the HUA is a small part of a much larger municipal dataset.

The dataset will not detect any changes in the HUA as there will be too much “noise” from the rest of the geography, and is therefore not useable.

Figure 8: an illustration of data collection challenges that different HUA's will face regarding the use of existing municipal data sets for detecting change within the HUAs.

The top scenario (“close match”) is ideal, and provides the city team with low effort, high quality data on assessing the outcomes and longer term impacts of their HUB-IN intervention. From conversation with the pilot cities, this scenario is considered rare.

The more likely “Split or fragmented” and “Subsumed” scenarios may need to be mitigated with more granular, local data that entails additional effort and expertise. An example of possible data collection mechanisms is set out in Figure 9 below. The actual methods used in each city will vary based on their chosen indicators and effort available.

Example data collection methods for the common monitoring questions

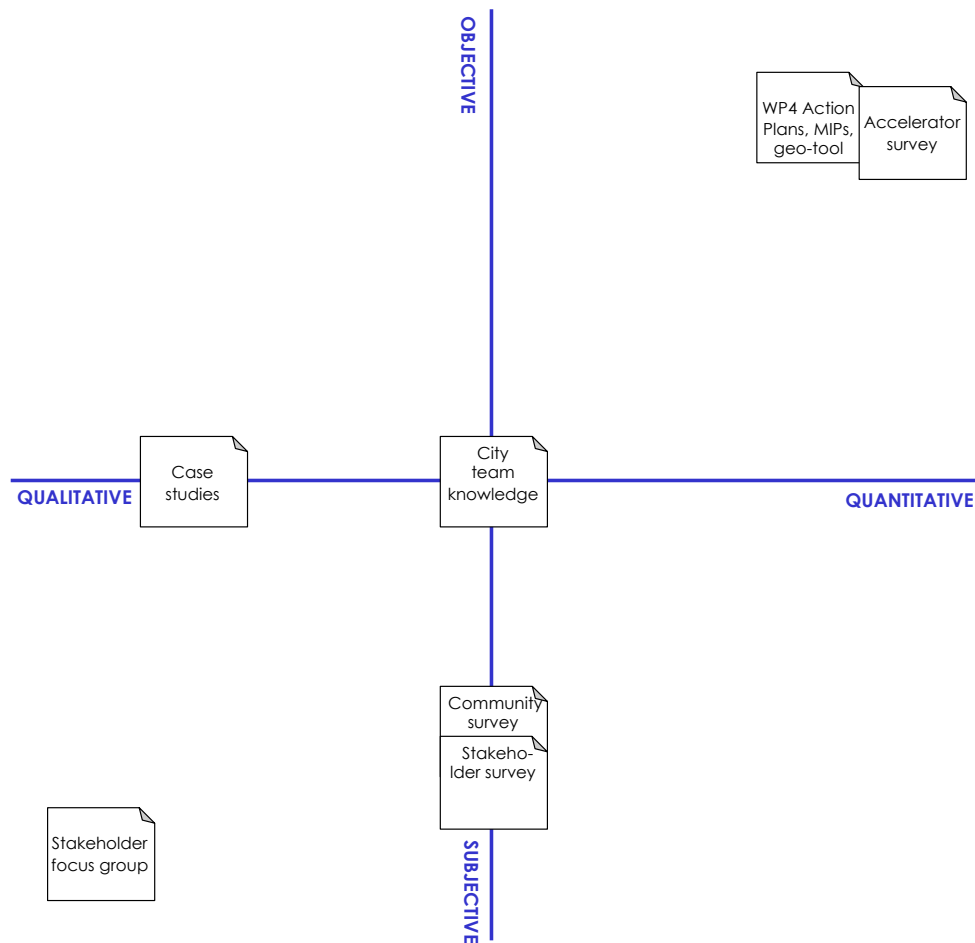


Figure 9: example data collection methods across quantitative, qualitative, objective and subjective dimensions.

Figure 9 to the left shows example mechanisms to collect data for each expected impact shown in Figure 7 (project logic model) above, split by the following characteristics:

- **Quantitative** – can be counted or given a number (measures quantities)
- **Qualitative** – can be described in language (measures qualities)
- **Objective** – based on verifiable real-world observations
- **Subjective** – based on personal perceptions, feelings and opinions

Through these varying combinations, cities will have a balance of data types that help to understand the progress of their intervention towards its objectives and to balance “the story behind the numbers” with the “numbers behind the stories”.

The data collection methods shown in the figure are example mechanisms that can be used for the common indicators that all cities will collect. Additional collection methods will exist for the bespoke indicators in each city and will be proposed in D5.2 (tailored methodologies for each city).

3.5.2 Intervention effects

Place-based interventions have “direct, indirect and induced” effects that can multiply – or weaken – the benefits of an intervention, as explained below. The extent to which they are relevant depends on the nature of an intervention, which affects the evaluation approach. Thus it is essential to test their relevance before appropriate considerations can be made for how they will (or will not) be treated in HUB-IN’s impact evaluations.

Table 2 below outlines at high level the effects and their treatment on HUB-IN. In the interests of a concise explanation, the table is kept to the bare minimum and assumes a certain familiarity with the concepts presented. For readers interested in further detail on the definitions and treatment on HUB-IN, see Appendix 9.2 below.

INTERVENTION EFFECT	TREATMENT ON HUB-IN
DIRECT EFFECTS: <i>changes in outcomes for the beneficiaries, due to the intervention</i>	
Agglomeration	Agglomeration monitored by case studies Cities may use case studies and anecdotal evidence to support a qualitative assessment on agglomeration.
Attribution vs Contribution	Contribution, not attribution Cities can perform qualitative assessment on how the intervention has <i>helped</i> to cause the observed changes (contribution), rather than attempt to quantify or statistically prove its causality (attribution). Qualitative case studies and anecdotal evidence can support this. This aligns with HUB-IN’s sister projects. Assessment of performance and alignment of SME’s with HUB-IN’s expected impacts can be based on survey responses.
Deadweight	[see Attribution vs Contribution] plus... Cities may perform quantitative assessment of deadweight for SME’s supported by the programme, via survey responses.
Jobs and employment effects	Direct effects only (HUA dependent) Cities can collect quantitative indicators on jobs, focussing on direct employment effects amongst beneficiaries only. They may also use qualitative case studies and anecdotal evidence to comment on indirect (supply chain) and induced (general, from employees’ income expenditure) employment effects.
Job quality	Job quality is relevant (pilot dependent) Cities may quantitatively understand the quality of jobs by comparing the median “Gross Value Added” (GVA) ^{vii} of the jobs supported against the median GVA of jobs in the HUA, or they may apply the assumption that Creative and Cultural Industry jobs are already of sufficient quality to warrant the HUB-IN intervention. Standard assumptions on persistence (how long jobs last) can be applied, and inclusivity can be determined via the proportion of jobs local to the HUA. On HUB-IN, the quality of jobs (permanent Vs seasonal, above minimum wage etc) is perhaps a more relevant indicator for city teams than tracking exact numbers of jobs in each SME etc.

^{vii} Gross Value Added measures the contribution made to the economy by an industry / producer / etc, and is the value of goods and services produced (after accounting for value already added by the producer’s supply chain).

INTERVENTION EFFECT	TREATMENT ON HUB-IN
Leakage effect	Leakage is relevant (pilot dependent) Cities may quantitatively assess proportion of jobs filled by local HUA residents and consider the impact indicators proposed on gentrification.
Optimism bias	Optimism bias is relevant to supported SME's growth forecasts Based on existing studies, cities may apply an assumption that only 80% of SME's estimated growth will be realised. ²⁴
Productivity effects	Productivity monitored quantitatively or qualitatively Cities may seek to quantitatively understand the overall productivity growth of supported SMEs by comparing total output / total staff via SME surveys (N.B. high effort) or by more qualitative evidence of HUA changes in labour (training), entrepreneurship (support), capital (access to finance) and resources (circular business models in Cluster 2) and their effect on business inputs.
INDIRECT EFFECTS: changes in outcomes for the larger target population, due to the intervention	
Substitution effect	Substitution monitored by case studies Cities may use case studies and anecdotal evidence to support a qualitative assessment on substitution.
INDUCED EFFECTS: changes in outcomes outside of the target population group, due to effects along business value chains, altered business environments etc	
Spill-over effects	Spill-over effect monitored by case studies Cities may qualitatively recognise that their interventions can have spill-overs and collect evidence of them: case studies or anecdotal evidence can support this.
Displacement effect	Displacement monitored by case studies
Externalities	[see Spill-over effects]
Gentrification	Gentrification monitored on some pilots Cities may capture a balance of data on the slowing down and balancing of gentrification (rather than reversing) that has been coined by others as "gentlyfication". ²⁵ Specific indicators are illustrated in section 4.2 "Impact indicators" below.
FEEDBACK LOOPS: changes in outcomes over time due to the repeating nature of the intervention and / or its effects	
2 nd or 3 rd order effects	2nd / 3rd order effects to be considered The monitoring and evaluation framework supports qualitative identification of feedback loops and 2 nd or 3 rd order effects via considerations of unintended impacts, ongoing check-ins on findings and overall "lessons learned" activities.

Table 2: a summary of intervention effects, their relevance and treatment on HUB-IN. For readers interested in further detail on their definitions and treatment on HUB-IN, see Appendix 9.2 below.

4 Indicators

This chapter sets out relevant indicators, as gathered from the research identified in Chapter 2. It includes process and impact indicators, aligned with the Chapter 3 HUB-IN model, and quantitative, qualitative, objective and subjective indicators.

4.1 Common indicators

Regardless of which HUB-IN Clusters the cities decide to address and what their ultimate objectives will be, there are some processes that are common to all HUB-IN interventions (fostering co-creation, building networks etc). Therefore there are some common process indicators that all cities will need to monitor. The evaluation of these indicators can provide insights on the effectiveness of each city's HUB-IN intervention and lessons learned on what can be improved.

The criteria for selecting common process indicators are that:

- 1. the indicators are part of the common Theory of Change**
i.e. they monitor the effectiveness of the change pathways that are to be delivered in all pilot cities, as set out in Figure 7 (project logic model) above.
- 2. the indicators are feasible to be collected in a robust and credible manner**
i.e. there are mechanisms for collecting, analysing and interpreting the data that are proportionate with the cities' available effort, and that provide credible insights.
- 3. the indicators apply at city level**
i.e. they apply to providing the *city teams* with insights. Indicators at project level (e.g. the project's success in attracting more partner cities or disseminating and communications) are handled elsewhere in the project by the appropriate owners.

See Table 3 below for the full suite of indicators to be collected by city teams (including a placeholder for up to three bespoke outcome indicators which will be determined with the city teams during the formation of D5.2, the tailored methodologies).

Indicators (grouped by Expected Impact)

The full suite of indicators to be collected by the city pilot teams, grouped by expected impact to illustrate the relevance of the indicators. In addition, each city will select up to three bespoke indicators that are dependent on each city's upcoming Roadmap and definition of their Hub infrastructure.

EXPECTED IMPACT 1: Reversing trends of abandonment and neglect of historic heritage in urban areas and landscapes

	Ref	Indicator	Unit	Grant		Data collection mechanism
				Target per city	Agreement KPI	
Impacts	E11	Reversing trends of abandonment and neglect of historic heritage in urban areas and landscapes				
	E11-1	Case studies on outcomes and impacts	qualitative	NA		Stakeholder survey
	E11-2	Extent to which cultural heritage is being preserved, developed and unlocking value	Likert (1-5), qualitative checklist	NA		Stakeholder focus group
	E11-3	Leading and lagging HUA characteristics		NA		Community survey
Outcomes (medium term)		Recovery of cultural heritage values in HUAs with sense of local identity				
	E11-4	Communities' sense of place, feelings of belonging and participation	Likert (1-5), qualitative	4		Community survey
		Reduction in negative gentrification impacts with reversal of desertification processes				
	E11-5	Housing affordability, quality and abandonment	Likert (1-5), qualitative	NA		Community survey
	E11-6	Housing affordability ratio	median price / earnings	NA		City team knowledge / data
	E11-7	Number (or m2) of abandoned buildings	#, m2	NA		City team knowledge / GeoTool
	Outcomes (short term)		Increased social innovation and co-creation activities			
E11-8		Number of unique GeoTool survey responses	#	NA		WP4 GeoTool
E11-9		Number of views of each city's GeoTool website	#	NA		WP4 GeoTool
E11-10		Perceptions on the quality and innovativeness of the GeoTool survey responses	qualitative	NA		City team knowledge
		Sustainable new jobs created in the 3 Clusters				
E11-11		Acceleration of supported SMEs: cluster targeted, job quality, revenues, finances, skills etc	€, #, %	NA		SME survey
		More integrated strategies in HUAs to promote cultural heritage led regeneration, innovation and creativity				
	E11-12	City Team learnings on HUB-IN's Relevance and Coherence	qualitative	NA		City team knowledge
Outputs and activities		Outputs and activities				
	E11-13	Number of local associations and community groups committed	#	10-15	✓	WP4 Action Plans
	E11-14	Number of ideation sessions or prototyping designed and developed in each city	#	3-6	✓	WP4 "Modular Implementation Package 1"
	E11-15	Number of initiatives designed and developed in the cities for the regeneration of places & people	#	3-6	✓	WP4 "Modular Implementation Package 2"

EXPECTED IMPACT 2: New and tested blueprints for the socially and economically viable regeneration of European HUAs and cultural landscapes, with enhanced well-being and quality of life, social cohesion and integration.

	Ref	Indicator	Unit	Grant		Data collection mechanism
				Target per city	Agreement KPI	
Impacts		New and tested blueprints for the socially and economically viable regeneration of European HUAs and cultural landscapes, with enhanced well-being and quality of life, social cohesion and integration.				
	E12-1	Case studies on outcomes and impacts	qualitative	NA		Stakeholder survey
Outcomes (medium term)		Effective contribution of bottom-up policies and programmes to boosted innovation and new jobs and empowerment of heritage communities				
	E12-2	Learnings on HUB-IN's relevance, coherence, effectiveness, efficiency, impact and sustainability (OECD criteria)	qualitative	NA		City team knowledge
	E12-3	Acceleration of supported SMEs: cluster targeted, job quality, revenues, finances, skills etc (repeated from another impact above)	€, #, %	NA		SME survey
	E12-4	Real disposable household incomes	€	NA		City team knowledge / data
	E12-5	Jobs in cultural sector	#	NA		City team knowledge / data
	NA	Number of cities within HUB-IN Alliance adopting HUB-IN Toolkit (NA at city level, this project KPI is owned by WP6)	-	-	✓	-
		Increase in inclusiveness and the wellbeing of populations				
	E12-6	Communities' sense of place, feelings of belonging and participation	Likert (1-5), qualitative	4		Community survey
		Reduction of gentrification and desertification processes, increasing number of sustainable new jobs				
	E12-7	Housing affordability, quality and abandonment (repeated from another impact above)	Likert (1-5), qualitative	NA		Community survey
E12-8	Housing affordability ratio (repeated from another impact above)	median price / earnings	NA		City team knowledge / data	
E12-9	Number of (or m2) of abandoned buildings (repeated from another impact above)	#, m2	NA		City team knowledge / GeoTool	
Outcomes (short term)		New governance models boosted by social innovation				
	E12-10	Scores on network governance – inclusivity and effectiveness	Likert (1-5), qualitative	4		Stakeholder survey
Outputs and activities		Outputs and activities				
	E12-11	Number of local stakeholders participating in the development of HUB-IN pilot Action Plans, per workshop	#	25-35	✓	WP4 Action Plans
	E12-12	% of women and elderly residents engaged in the initiatives for the regeneration of places and people, per initiative	%	30-40	✓	WP4 "Modular Implementation Package 2"
	E12-13	Number of external local projects or programmes linked to the HUB-IN pilot for cross-fertilisation	#	15	✓	City team knowledge
	E12-14	Examples and perceptions on the value of cross-fertilisation activities	qualitative	NA		City team knowledge

EXPECTED IMPACT 3: Boosted heritage- and culture-relevant innovation, creativity, entrepreneurship and light 'reindustrialization' of HUAs and cultural landscapes

	Ref	Indicator	Unit	Grant		
				Target per city	Agreement KPI	Data collection mechanism
Impacts	Boosted heritage- and culture-relevant innovation, creativity, entrepreneurship and light 'reindustrialization' of HUAs and cultural landscapes					
	EI3-1	Case studies on outcomes and impacts	qualitative	NA		Stakeholder survey
	EI3-2	Commentary on intervention effects: agglomeration, deadweight, displacement, leakage, spill-over etc	qualitative	NA		Stakeholder survey
Outcomes (medium term)	Raised awareness of opportunities to foster job creation start-ups and social innovation enterprise within HUAs					
	NA	Number of Alliance cities added to the project (NA at city level, this project KPI is owned by WP6)	-	-	✓	-
	NA	# of entities and cities reached out to through comms & dissemination activities sharing HUB-IN results (NA at city level, owned by WP6&7)	-	-	✓	-
	EI3-3	Acceleration of supported SMEs: cluster targeted, job quality, revenues, finances, skills etc (repeated from another impact above)	€, #, %	NA		SME survey
	EI3-4	Real disposable household incomes (repeated from another impact above)	€	NA		City team knowledge / data
	EI3-5	Jobs in cultural sector (repeated from another impact above)	#	NA		City team knowledge / data
	Increased interest and understanding of how to achieve Hubs of Innovation and Entrepreneurship in Europe's HUAs					
	NA	# of participants (virtual or present) in the HUB-IN Academy (NA at city level, this project KPI is owned by WP6)	-	-	✓	-
	Increased numbers of sustainable, creative and culture-heritage oriented regenerated HUAs					
	NA	# of cities & other stakeholders engaged in the HUB-IN Alliance through an MoU (NA at city level, this project KPI is owned by WP6)	-	-	✓	-
Outcomes (short term)	Demonstration of evidence-based successful heritage value-led regeneration					
	EI3-6	Barriers, enablers and opportunities in the entrepreneurial ecosystem	qualitative	NA		Stakeholder focus group
Outputs and activities	Outputs and activities					
	EI3-7	Number of ideas or solutions explored or prototyped during the invention process	#	5-7	✓	WP4 "Modular Implementation Package 1"
	EI3-8	Number of ideas or solutions explored during the accelerator programs	#	8-10	✓	WP4 "Modular Implementation Package 3"

EXPECTED IMPACT 4: Cross-sector collaboration, creation of job opportunities and skills in cultural and creative sectors and innovative manufacturing linked to historic heritage

	Ref	Indicator	Unit	Grant		
				Target per city	Agreement KPI	Data collection mechanism
Impacts	Cross-sector collaboration, creation of job opportunities and skills in cultural and creative sectors and innovative manufacturing linked to historic heritage					
	EI4-1	Case studies on outcomes and impacts	qualitative	NA		Stakeholder survey
Outcomes (medium term)	Effective urban regeneration					
	EI4-2	Barriers, enablers and opportunities in the entrepreneurial ecosystem	qualitative	NA		Stakeholder focus group
	EI4-3	Housing affordability ratio	median price / earnings	NA		City team knowledge / data
	EI4-4	Real disposable household incomes (repeated from another impact above)	€	NA		City team knowledge / data
	EI4-5	Jobs in cultural sector (repeated from another impact above)	#	NA		City team knowledge / data
Outcomes (short term)	Improved innovation processes and connections between entrepreneurs and innovators. Increased densification of the innovation & entrepreneurial ecosystem					
	More complex and interconnected networks of entrepreneurship and innovation across HUA					
	EI4-6	Scores on intracity networks – density, diversity, spontaneity, value	Likert (1-5)	4		Stakeholder survey
	EI4-7	Scores on intercity networks – density, diversity, spontaneity, value	Likert (1-5)	4		Stakeholder survey
	NA	Number of Alliance cities added to the project (NA at city level, this project KPI is owned by WP6)	-	-	✓	-
	NA	# of participants (virtual or present) in the HUB-IN Academy (NA at city level, this project KPI is owned by WP6)	-	-	✓	-
	NA	# of cities & other stakeholders engaged in the HUB-IN Alliance through an MoU (NA at city level, this project KPI is owned by WP6)	-	-	✓	-
	Improved qualifications and skills of local stakeholders and citizens in a culture-heritage economy					
	EI4-8	Acceleration of supported SMEs: cluster targeted, job quality, revenues, finances, skills etc (repeated from another impact above)	€, #, %	NA		SME survey
	Gaps in traditional public investments overcome via new financing mechanisms					
	EI4-9	SME's application of innovative finance, governance, business models	qualitative	NA		SME survey
Outputs and activities	Outputs and activities					
	EI4-10	Number of products or services developed during the accelerator programs	#	1-2	✓	WP4 "Modular Implementation Package 3"
	EI4-11	Expected financial leverage to ensure the HUB-IN pilots' activities beyond the project lifespan	€	1,000,000	✓	City team knowledge

Table 3: indicators to be collected by the city pilot teams, grouped by layer. N.B. cities also have up to three bespoke indicators that can be defined as their Roadmaps and intervention plans become defined. See Appendix 9.10 for Grant Agreement project KPI's not in scope for this document (e.g. Academy or communications indicators).

Indicators (grouped by data collection mechanism)

The same full suite of indicators to be collected by the city pilot teams, but this time grouped by data collection mechanism to help cities with operationalising the data collection. A placeholder is left for the three bespoke indicators that are dependent on each city's upcoming Roadmap. To assist city teams, an easily useable template is suggested for each data collection mechanism – see the Appendices.

1



Stakeholder focus group

Invitees: At least 1 representative from each core stakeholder group in the city's key stakeholder list

Frequency: Quarterly

Format: Online discussion, 120 mins

Indicators: For each of the HUB-IN Ingredients and Cultural and Institutional Arrangements:

- E11-2 extent to which cultural heritage is being preserved, developed and unlocking value
- E13-6 barriers, enablers and opportunities in the entrepreneurial ecosystem

2



Stakeholder survey

Invitees: A large panel from each group in the city's key stakeholder list

Frequency: Quarterly

Format: Online survey with data visualisation capabilities (<15 mins to complete)

Indicators:

- E11-1 case studies on outcomes and impacts
- E12-10 scores on network governance – inclusivity and effectiveness
- E13-2 commentary on intervention effects: agglomeration, deadweight, displacement, leakage etc
- E14-6 scores on intracity networks – density, diversity, spontaneity, value
- E14-7 scores on intercity networks – density, diversity, spontaneity, value

3



SME survey

Invitees: SMEs supported by the HUB-IN support programmes

Frequency: Quarterly

Format: Online survey (e.g. SurveyMonkey or similar), ideally <5 mins to complete

Indicators:

- E11-11 acceleration of supported SMEs: cluster targeted, job quality, revenues, finances, skills etc etc
- E14-9 SME's application of innovative finance, governance, business models

4



Community survey

Invitees: Panel drawn from community groups in the city's Roadmap

Frequency: Quarterly

Format: Online survey <10 mins

Indicators:

- E11-3 leading and lagging HUA characteristics
- E11-4 communities' sense of place, feelings of belonging and participation
- E11-5 housing affordability, quality and abandonment

5



City Team knowledge / data

Invitees: Core HUB-IN City Team

Frequency: Quarterly

Format: Capture data directly into the quarterly report dashboard

Indicators:

- E11-6 housing affordability ratio
- E11-10 perceptions on the quality and innovativeness of the GeoTool survey responses
- E11-12 learnings on HUB-IN’s relevance, coherence, effectiveness, efficiency, impact and sustainability
- E12-4 real disposable household incomes
- E12-5 jobs in cultural sector
- E12-13 number of external local projects or programmes linked to the pilot for possible cross-fertilisation
- E12-14 examples and perceptions on the value of cross-fertilisation activities
- E14-11 expected financial leverage to ensure the HUB-IN pilots’ activities beyond the project lifespan

6



WP4 provision

Invitees: NA (WP4 provides the data directly to the cities)

Frequency: Quarterly

Format: Capture data directly into the quarterly report dashboard

Indicators:

From the Action Plans

- E11-13 number of local associations and local community groups committed with HUB-IN
- E12-11 number of local stakeholders participating in the development of Action Plans, per workshop

From the “Modular Implementation Packages”

- E11-14 number of ideation sessions or prototyping designed and developed in each city
- E11-15 number of initiatives designed and developed for the regeneration of places and people
- E12-12 percentage of women and elderly residents engaged in regen. of places and people, per initiative
- E13-7 number of ideas or solutions explored or prototyped during the invention process
- E13-8 number of ideas or solutions explored during the accelerator programs
- E14-10 number of products or services developed during the accelerator programs

From the GeoTool

- E11-7 number (or m2) of abandoned buildings
- E11-9 number of unique GeoTool survey responses, per survey
- E11-9 number of views of each city’s GeoTool website

X



[bespoke mechanisms as will be defined in D5.2 “Adapted monitoring methodology to each pilot city”]

Format: municipal datasets | Accelerators | real estate | intervention data | smart meters | surveys | interviews | etc

Indicators:

- BES1-3 bespoke indicators tailored to each pilot city’s intervention [see section 4.2 below for examples]

Figure 10: the full suite of indicators to be collected by the city pilot teams, grouped by data collection mechanism

4.2 Bespoke indicators

In addition to the common indicators, some indicators will be necessarily bespoke to each city, driven by the nature of their unique intervention as defined in their upcoming Roadmaps, infrastructure development and Action Plans. The Grant Agreement gives room for “up to three” bespoke indicators per city, which may likely be slightly more medium- and long-term according to their defined interventions and objectives.

One of HUB-IN’s intended unique contributions is the proposal of three “Clusters of Innovation”, as set forth in the [HUB-IN Framework](#). These Clusters propose a wide range of thematic areas for intervention, each of which would be able to target numerous outcomes and impacts. Until the Roadmaps and Action Plans are completed, the project has steered that pilot cities are not able to identify the specifics of their intervention in enough detail to be able to prioritise a small set of bespoke indicators. Therefore a larger (non-exhaustive) suite of possible indicator options is suggested here. Cities will need to go through a process of shortlisting their priority indicators at the appropriate point in the project’s evolution, and the indicators presented in this document are for now to be considered as an indicative menu of possible options, for later selection and refinement according to the local specifics. This selection will be accomplished by cities with WP5’s support in D5.2 “Adapted monitoring methodology to each pilot city”

The criteria for that selection are that:

- 1. the outcome being monitored has strong a strategic fit with objectives**
i.e. monitoring the outcome will provide insights on the intervention’s progress towards its most important objectives.
- 2. the intervention directly contributes to the outcome**
i.e. the city’s intervention’s outputs can be shown to directly drive or contribute to the outcome.
- 3. the outcome has a high expected scale of impact**
i.e. there is expected to be enough “signal” to detect a change with project timescales, and thus to justify the expenditure of effort in measuring it.
- 4. the outcome has a high expected ease of measurement**
i.e. the data is available and accessible in appropriate formats, timescales, accuracy and trustworthiness etc, and the city team has the required skills and resourcing to interpret it.

See Table 4 below for the list of theme and sub-themes, non-exhaustive at this stage of the project. The indicators are indicative and may need added to or refined as the city teams produce their Roadmaps, at which point the indicators can be prioritised and data collection plans written that are suitable for the local circumstances.

Economic outcome indicators

Theme	Sub-theme
Jobs supported	Jobs supported (full time equivalents)
Intellectual property	Intellectual property Digital innovation
Investment	HUA investment
Living accommodation	Availability Affordability Social inclusion [see Social tab] Attractiveness
Night time economy	Events Safety Illumination Connectivity (transport) Noise Waste
Pop-up sales revenues	Pop-ups, markets and street vendors
Poverty	Poverty
Property values	Residential Commercial Abandoned Contribution from developers (tax) Condition
Skills	Training HUA education levels
SME acceleration	Access to support organisations SME investment SME productivity
Tax	Business rates Real estate development
Transport	Transport efficiency
Workspace	Office space Co-working space

Environmental outcome indicators

Theme	Sub-theme
Air quality	Emissions Concentrations
Blue space	Availability Usage Conservation
Carbon footprint	Local food Mobility Energy efficiency Renewable energy Waste management emissions
Energy efficiency	Buildings Neighbourhoods
Green space	Availability Usage Health and exercise Conservation
Noise	Noise
Renewable energy	Consumption Solar generation potential Wind generation potential Other generation potential
Sustainable transport	Modal shift [see Social list] Air quality Carbon emissions
Water management	Freshwater consumption Freshwater quality Mains water consumption Flood protection
Waste management	HUA in general Events Cleanliness Circularity

Social outcome indicators

Theme	Sub-theme
Civic political participation	Political processes Ownership of assets
Connectivity	Infrastructure - public transport Infrastructure - cycling and walking Infrastructure - electric & micromobility Accessibility
Gentrification	Gentrification
Green and blue space	Accessibility
Health and wellbeing	Health Air quality Activity and exercise Wellbeing
Jobs supported locally	Jobs supported by local labour force
Living accommodation	Affordability Satisfaction
Safety	Crime levels
Services	Infrastructure Accessibility
Social activities	Infrastructure Participation Personal networks
Social inclusion	Education Health Heritage Political processes
Social innovation	Social innovation
Tourism sustainability	Tourism sustainability

Cultural outcome indicators

Theme	Sub-theme
Asset base	Infrastructure Utilisation
Awareness	Community Visitors
Cultural vibrancy	"City as a canvas" Events Online engagement
Digital innovation	Infrastructure 5G, immersive tech, apps
Heritage site profitability	Public expenditure Footfall Dwell time Daily spend Capacity Maintenance costs
Place identity	Place identity Civic pride
Tourism	Tourism spend (leisure purpose) Tourism spend (business purpose) Tourism accessibility Tourism accommodation Tourism events Tourism attractiveness Tourism satisfaction
Traditional crafts and skills	Awareness Training Public engagement

Table 4: an indicative and non-exhaustive view of indicator themes and sub-themes for HUB-IN across economic, environmental, social and cultural impact dimensions. N.B. some indicators can sit across multiple dimensions (e.g. tourism can have both cultural and economic elements etc).

How do the indicators link to the Clusters?

The indicators are structured according to the well-known economic, environmental, social and cultural dimensions. The project explored structuring indicators by the Clusters as a more innovative approach, however there is enough overlap between the Cluster thematic areas to lead to duplication of indicators and thus a potentially complicated system for city teams to follow – and which would in any case be sourced from economic, environmental, social and cultural assessment indicators.

Nevertheless, the indicators do map across the Clusters – see Figure 11 below for an indicative heatmap of which outcomes are expected to be most relevant to which HUB-IN Cluster thematic areas. N.B. each city intervention is unique and the heatmap is an indicative view only, to stimulate discussion amongst city teams when selecting the indicators for their unique interventions.

KEY

- highly likely to be a relevant outcome
- may be a relevant outcome
- relevance depends on the details OR is generic to most HUB-IN interventions

ECONOMIC OUTCOMES

- Jobs supported
- Intellectual property
- Investment
- Living accommodation
- Night time economy
- Pop-up sales revenues
- Poverty
- Property values
- Skills
- SME acceleration
- Tax
- Tourism
- Workspace

ENVIRONMENTAL OUTCOMES

- Air quality
- Blue space
- Carbon footprint
- Energy efficiency
- Green space
- Noise
- Renewable energy
- Sustainable transport
- Water management
- Waste management

SOCIAL OUTCOMES

- Civic political participation
- Connectivity (transport)
- Gentrification
- Health and wellbeing
- Jobs supported locally
- Safety
- Services
- Social activities
- Social inclusion
- Social innovation
- Tourism sustainability

CULTURAL OUTCOMES

- Asset base
- Awareness
- Cultural intensity
- Digital innovation
- Heritage site profitability
- Place identity
- Traditional crafts and skills

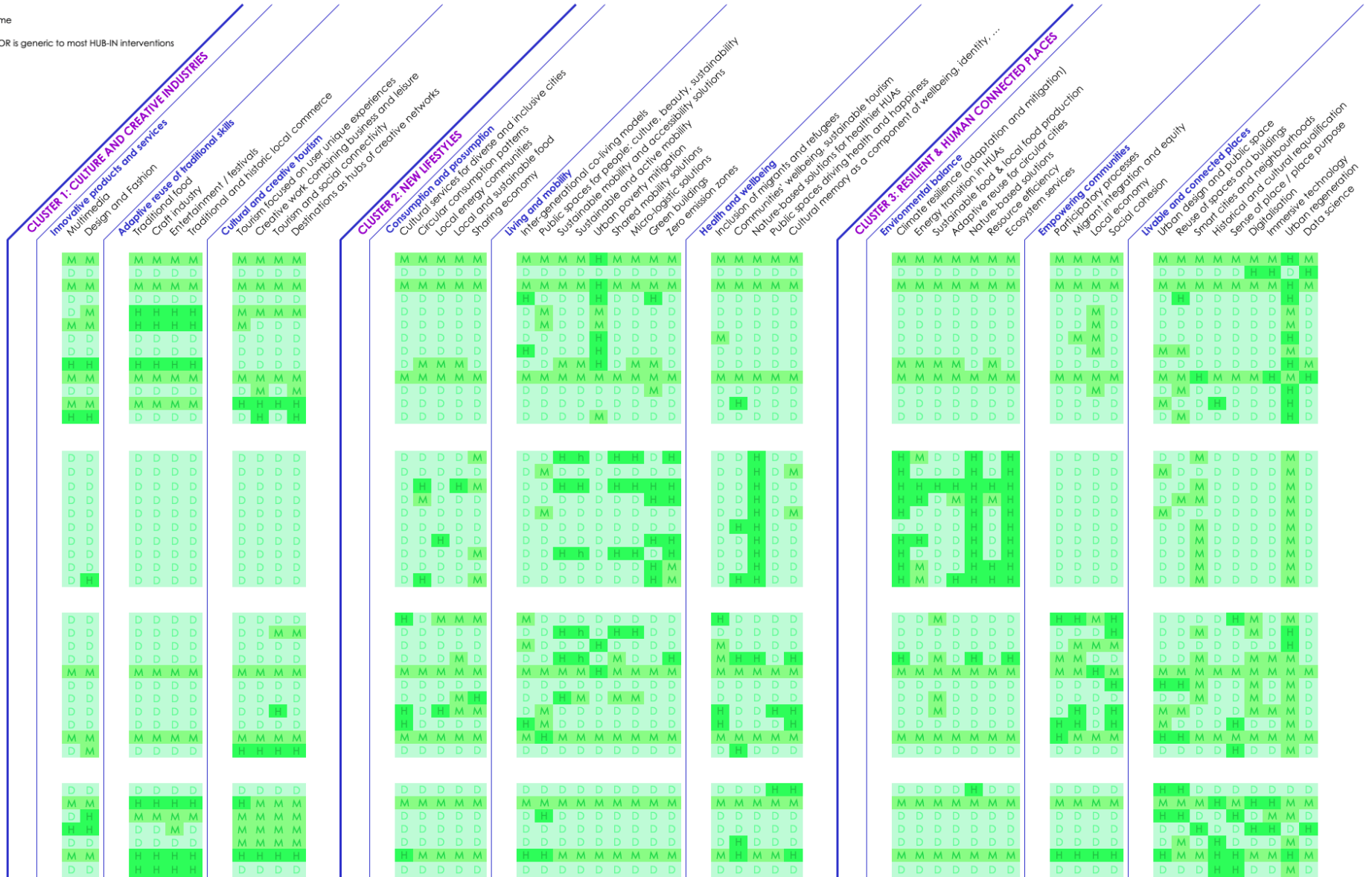


Figure 11: heatmap of which outcomes are most relevant to which HUB-IN Cluster thematic areas. N.B. each city intervention is unique and the heatmap is an indicative view only, to stimulate discussion amongst city intervention owners when selecting their indicators.

5 Tailoring indicators to the Cities

This chapter acknowledges the breadth of what HUB-IN cities *could* do, and proposes the approach for prioritising monitoring according to what they *will* do. This is an approach for tailoring indicators and their associated data collection/analysis/interpretation according to the objectives of the city interventions, defined in the upcoming Roadmaps.

As referenced in the previous chapter, HUB-IN proposes that cities are able to select up to three indicators to assess their impacts (if they have available effort and appetite for more they are of course welcome to – WP5's available effort is limited however and so would be on a best endeavours basis). They will have defined the vision, objectives, and initiatives for their intervention during their Roadmap formation, in participation with their stakeholders. Thus, for evaluation and monitoring, the city team's next steps will be to:

FOR THE COMMON INDICATORS

1. **Form the distribution lists** for the surveys and focus groups. These will form a standard panel to respond to recurring quarterly surveys and focus groups.
2. **Set up the surveys and focus group materials** (e.g. using SurveyMonkey, or Miro etc). Full guidance for each survey etc can be found in the Appendices.

FOR THE BESPOKE INDICATORS

1. **Recap on their intervention's vision, objectives, and initiatives** as agreed in their Roadmaps and Action Plans – that design of their intervention will be the guiding light for what impact indicators will be appropriate to monitor and evaluate.
2. **View the “menu” of impact indicators for indicators that are relevant** to the intervention defined in the Roadmaps and Action Plans. See Table 4 above for the impact indicator themes.
3. **Prioritise a set of up to three indicator themes.** The below criteria will help the city teams in this prioritisation, by assessing indicators according to:
 - a) *Strategic fit with objectives*
i.e. monitoring the theme should provide insights on progress towards the most important objectives, as viewed by the key stakeholders
 - b) *Direct contribution of the intervention to that outcome*
i.e. the intervention can be shown to directly drive or contribute to the indicator
 - c) *Expected scale of impact*
i.e. there will be enough “signal” to detect a change within project timescales, and thus to justify the effort in measuring it
 - d) *Expected ease of measurement.*
i.e. the data is accessible in appropriate formats, timescales, accuracy and trustworthiness etc, and the city team has the required skills and resourcing to interpret it
4. **Sense-check that prioritisation of indicator themes, by considering:**
 - a) *Direct and indirect effects*
i.e. impacts that are immediate consequences of the intervention (direct), and impacts that are produced as a result of a chain of impacts or complex pathways (indirect) (e.g. a cycle scheme that increases footfall to local businesses may also

indirectly increase tax revenue from the businesses).

b) *Intended and unintended consequences*

For example, installing smart sensors in HUA parking spaces and a parking app to guide drivers to available spaces – this may intentionally result in shorter journey times and fewer emissions for those drivers, but also the improved driving experience may unintentionally induce new car journeys and thus more emissions.

5. **Scope the boundaries and depth of those indicators**

Scoping is the process of deciding the boundaries and levels of detail. It recognises that there is a link between the level of detail and rigour possible in an assessment and the effort / costs needed to undertake it. Of relevance here are:

a) *Temporal dimensions*

i.e. the timeline of the project and the trajectory over which impacts will materialise. In general, short- and medium-term impacts are more predictable and should receive more focus from the analysis

b) *Spatial dimensions*

i.e. the scale of the HUA and the intervention's activities within it. It is also good practice to consider wider effects (these are covered by qualitative assessments of spill-over effects etc as per Figure 10 above).

c) *Resources*

i.e. staff availability, skills requirements, and data availability. These need to be balanced with the requirements on collecting, analysing and interpreting data.

In upcoming D5.2 logic model workshops, WP5 will play the role of “critical friend” and test the logic behind the city team’s choice in the steps above. The purpose is to identify hidden assumptions, discover unintended (positive or negative) impacts, and sense-check the availability of data. An agreed data collection plan can then be written.

6. **Select a data collection approach**

This step will be done with assistance from WP5 in D5.2 logic model workshops

The data required for each indicator will be specified, including its unit, time period, source and more. This depends on the city team's knowledge of available data / relevant stakeholders who can provide. Depending on the indicator, these may be quantitative and compare progress against a baseline or counterfactual (“what would have happened anyway in the absence of the intervention”). In other cases, they may be qualitative.

7. **Collect data**

City teams are responsible for conducting their own data collection. The precise date for initiating the data collection depends on project readiness and the maturity of the city's intervention definition. See chapter 7 below for associated risks and mitigations.

8. **Analyse, interpret and report**

City teams are responsible for conducting their own data analysis, interpretation and reporting. For this, HUB-IN has a regular rhythm of quarterly reports whereby city teams can review their progress, capture case studies, understand barriers or opportunities and take adaptive action as needed for the upcoming quarter.

6 Leveraging results across HUB-IN

6.1 Quarterly review process (D5.3)

HUB-IN has a regular rhythm of quarterly reports whereby city teams can review their progress, capture case studies, understand barriers or opportunities and take adaptive action as needed for the upcoming quarter. The dates that these begin depend on when each city's actual intervention will begin, per the Roadmaps and city team readiness.

Although to start off with it will be too early to see results of the impact evaluation, the results of the process evaluation will enable city teams to draw lessons learned and identify next steps to overcome blockers or exploit opportunities for improvement.

To assist in this process, a dashboard is offered for simple, integrated and consistent monitoring. It is split by each of the Grant Agreement's Expected Impacts per Figure 7 above (project logic model) with a blend of quantitative and qualitative indicators, as per Table 3 above. See Figure 12 below as an indicative example.

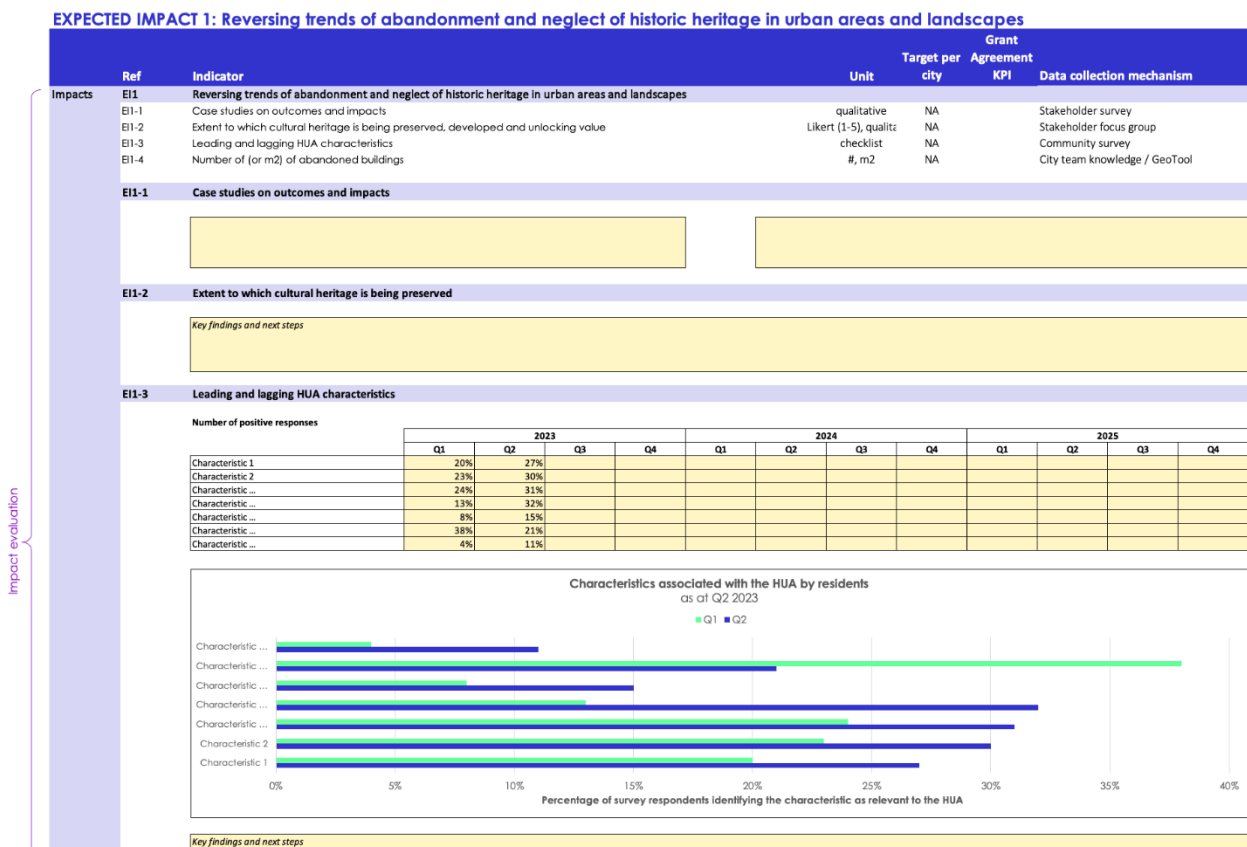


Figure 12: example screenshot from part of the quarterly reporting dashboard, here capturing checklist and qualitative assessments of cultural characteristics and assessments on the extent to which cultural heritage is being preserved and unlocked.

6.2 Overall evaluation of the city interventions (D5.4)

In the final 6 months of the project, the overall results of the city pilots will be assessed in D5.4 “Final economic, social and environmental appraisal lessons learned”. This will be drawn from the city teams’ findings on their common and bespoke indicators.

The report will include findings regarding the successes, failures, impacts, lessons learned and risks and issues of each pilot.

6.3 HUB-IN Guidebook for cities (D5.5)

Also in the final 6 months of the project, a ready to-use guidebook for cities within and outside the consortium will be produced, to apply the new services piloted in their own context. This is D5.5 “HUB-IN Guidebook for cities”.

This will include assessing methods for transferring the project pilot results to a wider EU audience, tailored to individual cultural, economic and geographical situations, and will build on WP3 and WP4 experiences and results, as well as pertinent lessons learned from D5.4.

7 Risks

There are a number of risks regarding pilot and partner cities monitoring and evaluating their HUB-IN intervention, as noted below:

- **Trade-off between intervention definition dates and cities' ability to baseline**
As a research and development project, the first half of HUB-IN's four-year project has been dedicated to designing the foundations of the city interventions (entrepreneurial ecosystems, cultural landscapes etc). Having a well-defined intervention with clear, agreed objectives is a key dependency for designing effective monitoring and evaluation plans – and thus being able to collect baseline data in sufficient time before the intervention begins.

At the time of writing, cities are still in the process of agreeing the specific nature of their unique interventions (to be published in the upcoming Roadmaps and, later, Action Plans), and the project is in the process of defining the details of “what a Hub is” in Task 4.2.1 “Establishing the digital and physical Hubs’ infrastructure”. Previous consultations between WP5, cities and the project revealed they will be unable to fully agree the objectives or priorities of their interventions until the Roadmaps (and perhaps even the later Action Plans) are completed.

As a consequence, the available time between cities defining their intervention and initiating them is reducing. The important risk is that cities will not have sufficient time to agree their priority indicators and thus to collect baseline data ahead of their intervention. This will directly limit the ability to conduct pre- and post-intervention comparisons and thus to draw conclusions on the extent of change that HUB-IN has contributed to.

Mitigation: the project has accepted that there is a trade-off between cities having the time to define their intervention through the Roadmap and Action Plan Activities, and the need for an early definition in order to secure sufficient baseline monitoring data. Once the Roadmaps are complete, WP5 will be able to assess with the cities whatever baselining is possible in the time remaining before their intervention, and baselining will then proceed on a best endeavours basis. The “process evaluation” part of the framework also supports assessment of progress in the absence of an impact baseline.

- **Requirements on expertise**
Impact assessment is normally conducted by assessors with expertise in economics, environmental sciences, social sciences, data analysis and / or statistics. Per the HUB-IN model, impact assessment will be carried out by each city team who may or may not have experience in these fields. There is a resultant risk to the levels of comfort that cities have in collecting, analysing and interpreting data, which may result in the possible over- or understating of benefits, or time-effectiveness of available resource. Common pitfalls cited by impact evaluations on projects can include issues with accuracy and validity of findings; the ethics of data collection; and claims of causality when only associations are observed.

Mitigation: the Common Impact Assessment Framework outlines principles to help mitigate this risk including transparency, ethics, practicality and adhering to a conservative principle when reporting findings.

Good practice from related fields of expertise are shared in the body text and also underpin the selection of indicators and analysis techniques. The methodology is supported with granular guidance on data collection techniques and a standardised quarterly reporting dashboard is offered to provide assistance and transparency on how the city teams' evaluations are formed.²⁶ WP5 will also check in with cities for each quarterly report to understand any barriers or complications.

- **Divergence in city readiness**

As may be expected, the eight pilot cities have different levels of readiness when it comes to defining their HUB-IN intervention and thus different levels of readiness for engaging on their monitoring and evaluation plans with WP5. This raises the risk of preventing a standardised approach and timelines on D5.2 (tailoring the methodology to each city), with the disjointed timelines and increased effort that that entails for cities and work packages.

Mitigation: the monitoring framework proposed has been standardised where possible, including the process evaluation indicators which will be common to all cities. The project acknowledges the variation in city readiness – to meet timelines, WP5 will work with cities at the level of readiness they have.

- **Changes in city priorities due to political changes and other global events**

A normal factor of life for municipal teams is undergoing elections and mayoral changes etc, in addition to responding to unforeseen global factors and trends such as COVID or geo-political instabilities of neighbouring regions. These raise the risk of their HUB-IN objectives changing as their municipal teams or priorities change, leading to duplicated effort collecting data for indicators that then later become deprioritised (or conversely not collecting data for indicators that then later become prioritised). The recognition of this has led to some hesitancy in cities selecting their indicators until their Roadmaps are firmly defined, out of reluctance to later find the indicators have become redundant.

Mitigation: changes in teams / mayors etc and political priorities is accepted as a normal circumstance in municipal teams. When producing D5.2 (tailored methodologies to each city), WP5 will ask the city teams to commit to their agreed indicators, recognising the risks of expending effort and then later altering their agreed indicators.

- **City overwhelm on the number of indicators**

HUB-IN's Activity Clusters of Innovation cover a very broad set of potential thematic areas, each of which could themselves have a broad set of indicators. Until the cities agree and prioritise the objectives of their unique intervention in their Roadmaps, the list of possible indicators remains large. The project has also requested indicators for some of the Grant Agreement's project KPIs, governance, financial and business models, and the entrepreneurial ecosystem.

The broad range of possible indicators needs to fit within scope, and there is a risk that if the cities try to measure too many indicators then their effort will be spread too thinly, impacting the quality of their findings. This is cited finding of previous EU programmes (OpenHeritage, SoPHIA etc) which encountered either data issues or the pilot teams feeling daunted by the scale of monitoring options available to them / required of them.

Mitigation: WP5 recommends balancing the depth and breadth of possible insight with the resources available to the city teams, as reflected in the Grant Agreement for “a handful” of common indicators and “up to three” bespoke indicators, so as to most effectively use the city team's limited effort available. Where cities have additional resource and appetite, they will be able to select additional indicators and WP5 will support on a best endeavours basis within the available resourcing.

- **Double counting**

Cities will need to avoid presenting multiple impacts together if they overlap, in order to avoid double counting the benefits. E.g. if a city was to evaluate uplifts in supported SME's sales AND uplift in productivity, both in monetized terms.

Mitigation: WP5 will help cities select and monitor impacts in ways that avoid double counting in the D5.2 tailored methodology workshops.

8 Bibliography

1. Smith B. *HUB-IN Alignment with European and International Policy HUB-IN Framework*; 2021. https://hubin-project.eu/wp-content/uploads/2021/12/HUB-IN-Framework_Policy_LongRead.pdf.
2. HM Treasury. *The Green Book Central Government Guidance On Appraisal And Evaluation 2022*. 2022. www.gov.uk/official-documents. Accessed June 25, 2022.
3. OECD. *Better Criteria for Better Evaluation Revised Evaluation Criteria Definitions and Principles for Use OECD/DAC Network on Development Evaluation*. <https://www.oecd.org/dac/evaluation/revised-evaluation-criteria-dec-2019.pdf>.
4. HM Treasury. *Magenta Book Central Government Guidance on Evaluation*; 2020. <https://www.gov.uk/government/publications/the-magenta-book>.
5. Department for Environment Food and Rural Affairs. *Air Quality Appraisal: Impact Pathways Approach*. <https://www.gov.uk/government/publications/assess-the-impact-of-air-quality/air-quality-appraisal-impact-pathways-approach>. Accessed June 25, 2022.
6. Andrade C, Henry DC, Shefali E, Marc P. *Performance in Use Toolkit: A Practical Guide to Impact Assessment for Urban Innovation Projects*; 2017.
7. Rogers P. Theory of Change. 2014. www.unicef-irc.org. Accessed June 25, 2022.
8. Vogel I. ESPA guide to working with Theory of Change for research projects. www.isabelvogel.co.uk. Accessed June 25, 2022.
9. Public Health England. *A Brief Introduction to Realist Evaluation*; 2021. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004663/Brief_introduction_to_realist_evaluation.pdf.
10. Pawson R, Tilley N. Realistic evaluation. 1997:235.
11. Regulatory Policy Committee. *Proportionality Guidance for Departments and Regulators 2*.
12. IEMA. Getting EIA in proportion. <https://www.iema.net/articles/getting-eia-in-proportion>. Accessed June 25, 2022.
13. CHCfE Project. *Cultural Heritage Counts for Europe*; 2015. http://blogs.encatc.org/culturalheritagecountsforeurope/wp-content/uploads/2015/06/CHCfE_FULL-REPORT_v2.pdf.
14. CLIC Project. *Deliverable 2.4 Database of Indicators and Data in Pilot Cities*. https://www.clicproject.eu/wp-content/uploads/2022/01/D2.4_Database-of-indicators-and-data-in-pilot-cities.pdf.
15. OECD. *Applying Evaluation Criteria Thoughtfully*; 2021. <https://www.oecd-ilibrary.org/docserver/c249f611-en.pdf?expires=1656522427&id=id&accname=guest&checksum=6F1722382E7022267293B409EC9DAED1>.
16. SoPHIA Project. Social Platform for Holistic Heritage Impact Assessment. <https://sophiaplatform.eu/en>. Published 2021.
17. ROCK Project. Regeneration and Optimisation of Cultural heritage in creative and Knowledge cities. <https://rockproject.eu/documents-list>.
18. CLIC Project. *Deliverable 2.5 Methodologies for Impact Assessment of Cultural Heritage Adaptive Reuse*. <https://www.clicproject.eu/wp-content/uploads/2022/01/D2.5-Methodologies-for-impact-assessment-of-cultural-heritage-adaptive-reuse.pdf>.
19. Neelands J, Henry N, De Souza V, et al. Performance Measurement and Evaluation Strategy 2019-2024 Development Team Mark Scott | Coventry City of Culture Trust. <https://warwick.ac.uk/about/cityofculture/researchresources/2021-pme-strategy-oct19-online.pdf>.
20. OECD. *Glossary of Key Terms in Evaluation and Results Based Management*; 2010. <https://unsdg.un.org/sites/default/files/OECD-Glossary-of-Key-Terms-in-Evaluation-and-Results-based-Management-Terminology.pdf>.
21. Tasdemir C, Gazo R, Quesada HJ. Sustainability benchmarking tool (SBT): theoretical and conceptual model proposition of a composite framework. *Environ Dev Sustain*. 2020;22(7):6755-6797. doi:10.1007/S10668-019-00512-3
22. Dessein J, Soini K, Birkeland I, et al. Culture in, for and as sustainable development : Conclusions from the COST Action . 2015:72.
23. World Heritage Centre. *Recommendation on the Historic Urban Landscape*; 2019. <https://whc.unesco.org/en/hul>.
24. London & Partners. *Evaluation Methodology 2018*; 2018. <https://files.londonandpartners.com/l-and-p/assets/evaluationmethodologylp2018.pdf>.
25. Stauttene T, Robbe C. Gentrification without the Sharp Edges. Is there Such Thing as Gentlyfication? - The City at Eye Level. <https://thecityateyelevel.com/stories/gentrification-without-the-sharp-edges-is-there-such-thing-as-gentlyfication/>.

26. Chivite-Matthews N, Thornton P. Guidance On Evaluating The Impact Of Interventions On Business. 2011.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/212318/11-1085-guidance-evaluating-interventions-on-business.pdf. Accessed July 3, 2022.
27. Eurostat. Enterprises in cultural sectors (cult_ent).
https://ec.europa.eu/eurostat/cache/metadata/en/cult_ent_esms.htm. Accessed July 9, 2022.
28. Eurostat. *Statistical Classification of Economic Activities in the European Community*; 2008. <https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF>.
29. Kluge J, Stöterau J. *A Systematic Framework for Measuring Employment Impacts of Development Cooperation Interventions A Systematic Framework for Measuring Aggregate Employment Impacts of Development Cooperation 1*.
https://energypedia.info/images/5/54/A_Systematic_Framework_for_Measuring_Employment_Impacts_of_Development_Cooperation_Interventions.pdf.
30. HCA. *Additionality Guide Fourth Edition*.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/378177/additionality_guide_2014_full.pdf.
31. HM Treasury. *Supplementary Green Book Guidance Optimism Bias*. www.hm-treasury.gov.uk/greenbook. Accessed June 29, 2022.
32. Optimal Economics. Tourism Marketing Return on Investment: The Impact of Displacement. 2012.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/77592/Displacement_Final_Report.pdf.
33. Mehaffy M. In praise of “Goldilocks urbanism” – Future of Places Research Network. Future of Places Research Network. <https://foprn.org/2019/01/18/in-praise-of-goldilocks-urbanism/>.
34. Platek R, Särndal C. Can a statistician deliver. *J Off Stat*. 2001;(17(1)):1-20.
35. Paul B. Total Survey Error: Design, Implementation, and Evaluation. *Public Opin Q*. 2010;74(5):817–848. <https://academic.oup.com/poq/article/74/5/817/1815551>.
36. Kaplowitz MD, Hadlock TD, Levine R. A comparison of web and mail survey response rates. *Public Opin Q*. 2004;68(1):94-101. doi:10.1093/POQ/NFH006
37. HCA. About the Labour Force Survey (LFS).
38. Blank G. *Survey Technical Guidance: Samples, Design and Analysis*No Title.

9 Appendices

9.1 Glossary of terms

For HUB-IN

To avoid duplication, readers are referred to the [HUB-IN Framework](#) glossary of terms for:

- Co-creation
- Cultural Heritage
- Entrepreneurship
- Entrepreneurial Ecosystems
- Heritage-led regeneration
- Historic Urban Areas (HUAs)
- HUB-IN Clusters of Innovation
- HUB-IN Places
- Human Connected Design
- Inclusive and regenerative growth
- Innovation
- Open innovation
- Purposeful placemaking
- Regenerative
- Resilience
- Systems thinking and doing

For Creative and Cultural Industry classifications

When evaluating the Accelerator programme (growth in jobs, revenues etc of supported SMEs), the following NACE (Nomenclature of Economic Activity) codes are relevant: ^{27 28}

- **Manufacturing**
 - C18 Printing and reproduction of recorded media
 - C32.12 Manufacture of jewellery and related articles
 - C32.2 Manufacture of musical instruments
- **Wholesale and retail trade**
 - G47.61 Retail sale of books in specialised stores
 - G47.62 Retail sale of newspapers and stationery in specialised stores
 - G47.63 Retail sale of music and video recordings in specialised stores
- **Publishing activities**
 - J58.11 Book publishing
 - J58.13 Publishing of newspapers
 - J58.14 Publishing of journals and periodicals
 - J58.21 Publishing of computer games
- **Information and communication**
 - J59 Motion picture, video and television programme production, sound recording and music publishing activities
 - J60 Programming and broadcasting activities
 - J63.91 News agency activities
- **Professional, scientific and technical activities**
 - M71.11 Architectural activities
 - M74.1 Specialised design activities
 - M74.2 Photographic activities
 - M74.3 Translation and interpretation activities
- **Administrative and support service activities**
 - N77.22 Renting of video tapes and disks
- **Arts, entertainment and recreation, e.g.**
 - R90 Creative, arts and entertainment activities
 - R91 Libraries, archives, museums and other cultural activities

9.2 Intervention effects – treatment on HUB-IN

Place-based interventions have important “direct, indirect and induced” effects that can multiply – or weaken – the benefits of an intervention, as explained below. The extent to which they are potentially relevant depends on the nature of an intervention, which ultimately affects the evaluation approach. Thus, it is essential to test their relevance before appropriate considerations can be made for how they will (or will not) be treated on HUB-IN’s impact evaluations.

The **purple text** gives a summary of their treatment on HUB-IN for the skimming reader, and the **complete cell contents** give a fuller description for readers seeking more detail on the rationale. The treatments will be rolled into WP5’s guidance to cities in a simplified manner, so it is not essential for the city teams to deeply know this section – it is presented here under the principle of transparency.

INTERVENTION EFFECT	TREATMENT ON HUB-IN
<p data-bbox="193 689 778 728">Attribution vs Contribution</p> <p data-bbox="193 750 778 846"><i>Attribution</i> refers to the establishment of a causal link between an intervention’s activities and its observed change.</p> <p data-bbox="193 869 778 987"><i>Contribution</i>, on the other hand, recognises that the observed change may be driven by numerous other causal factors.</p>	<p data-bbox="785 689 1428 728">Contribution, not attribution</p> <p data-bbox="785 750 1428 1048">Relevance: HUB-IN interventions take place amidst numerous other financial investments, place developments, innovation strategies, R&D networks etc. In addition, the uniqueness of each HUA does not enable there to be a “control” area that is identical enough to compare changes in a robust manner, or to establish a “counterfactual” (what benefits would have occurred anyway without HUB-IN).</p> <p data-bbox="785 1070 1428 1189">Thus, it is more certain that HUB-IN will contribute to the intended outcomes alongside other casual factors than directly be a sole / predominant cause of them.</p> <p data-bbox="785 1211 1428 1249">Treatment:</p> <ol data-bbox="842 1272 1428 1682" style="list-style-type: none"> <li data-bbox="842 1272 1428 1451">1. Qualitative assessment on how the intervention has <i>helped</i> to cause the observed changes (as per the logic model in Figure 7 above) rather than attempt to quantify or statistically prove its causality. <li data-bbox="842 1473 1428 1570">2. Qualitative case studies and anecdotal evidence can support this, (aligning with HUB-IN’s sister projects). <li data-bbox="842 1592 1428 1682">3. Quantitative assessment of growth in SME’s supported by the Accelerator programme, via survey responses
<p data-bbox="193 1704 778 1742">Deadweight</p> <p data-bbox="193 1765 778 1973">The difference between outcomes that occurred due to the intervention and the outcomes that would have occurred anyway without the intervention.² This requires establishing a “counterfactual”, i.e. to quantify what benefits would have occurred anyway without HUB-IN.</p>	<p data-bbox="785 1704 1428 1742">[see Attribution vs Contribution], plus...</p> <p data-bbox="785 1765 1428 1803">Treatment:</p> <p data-bbox="785 1825 1428 1921">Quantitative assessment of deadweight for SME’s supported by the Accelerator programme, via survey responses</p>

INTERVENTION EFFECT

Jobs and employment effects

Direct employment effects are changes in employment among beneficiaries of the intervention that are directly caused by the intervention (e.g. SMEs in the Accelerator).²⁹

Indirect employment effects are changes in employment among the wider supply chains of the supported SMEs (due to the SMEs purchasing from them).²⁹

Induced employment effects are changes in employment within the HUA in general (e.g. because the SMEs and their supply chain employees are able to spend their additional income on goods and services)²⁹

TREATMENT ON HUB-IN

Direct effects only (HUA dependent)

Relevance: as noted in Figure 8 above (on data collection challenges that different HUA's will face regarding using municipal data sets for detecting change within the HUAs. The use of multipliers (to estimate the indirect and induced employment effects) requires expertise to ensure that the multipliers being used are valid for that sector, that local region, that point in time etc. It is considered that most cities will not have available effort or deep expertise to conduct analysis on indirect and induced employment effects.

Treatment:

1. Any job data will be measured in full time equivalents (FTE).
2. Cities can collect quantitative indicators on jobs, focussing on direct employment effects amongst beneficiaries only. City teams may collect such data via the SME Accelerator programme surveys.
3. They may also use qualitative case studies and anecdotal evidence to comment on indirect and induced employment effects.
4. Together these support commentary on HUB-IN's contribution towards indirect and induced employment effects.

Job quality

As important as the number of jobs gained is the:

1. **quality** of those jobs (productivity)
2. **persistence** (how long they last)
3. **inclusivity** (who fills them).²⁹

Job quality is relevant (pilot dependent)

Relevance: HUB-IN seeks to provide support to entrepreneurs, with a focus on Creative and Cultural Industries.

Treatment: depending on their intervention specifics, cities may:

1. ...apply the assumption that Creative and Cultural Industry jobs are already of sufficient quality to warrant the HUB-IN intervention; OR
...seek to quantitatively understand the **quality** of jobs by comparing the median "Gross Value Added" (GVA)^{viii} of the jobs supported against the median GVA of jobs in the HUA.
2. ...apply the assumption (based on existing studies) that job **persistence**

^{viii} Gross Value Added measures the contribution made to the economy by an industry / producer / etc, and is the value of goods and services produced (after accounting for value already added by the producer's supply chain).

will be three years³⁰

3. ...quantitatively understand the **inclusivity** via the proportion of jobs local to the HUA, (proportion of SME employees who identify as living within the HUA in surveys)

Productivity effects

Benefits that lead to producers seeing increased output for the same level of input. These typically lead to higher wages, rather than higher employment.

They may arise from transition to more productive jobs, or the same jobs may benefit from agglomeration (below), increased investment, increased competition, increased flow of ideas and more.²

Productivity is relevant (pilot dependent)

Relevance: HUB-IN seeks to provide support to entrepreneurs to scale their business maturity, upskill their talent and attract investment. Changes in resources, labour, capital (both physical and human) and entrepreneurship can all improve productivity.

Treatment: depending on their intervention specifics, cities may seek to...

1. ...**quantitatively understand** the overall productivity growth of supported SMEs by comparing total output / input via SME surveys. N.B. high effort.
2. ...**evidence** the expected productivity growth within the HUA due to *labour* by quantitatively monitoring the extent of HUB-IN training (and the resultant changes in skills via trainee surveys)
3. ...**evidence** the expected productivity growth within the HUA due to *entrepreneurship* by quantitatively monitoring the extent of business support provided to entrepreneurs (via the Accelerators) and the extent of social innovation (via WP4 ideation and prototyping activities)
4. ...**evidence** the expected productivity growth within the HUA due to *capital* by “checklist” monitoring of investment options that SMEs are aware of and able to access (via the city teams) and the extent of social innovation (via WP4 ideation and prototyping activities)
5. ...**evidence** the expected productivity growth within the HUA due to *materials and services*, by qualitative case studies on circular business models (Cluster 2) and their effect on business inputs.

INTERVENTION EFFECT

Agglomeration

Benefits come when firms and / or people locate near one another in geographical clusters, due to knowledge transfer, network effects, convenient footfall and other causes.²

Leakage effect

Leakage is the extent to which effects “leak out” of a target area or group into others.²

Optimism bias

Optimism bias is the demonstrated, systematic, tendency for project designers to be overly optimistic when forecasting the scale and timelines of future benefits.³¹

TREATMENT ON HUB-IN

Agglomeration monitored by case studies

Relevance:

HUB-IN intends to establish “Clusters of Innovation” which – if sufficient scale is reached – benefit from agglomeration.

The short-term scale of the HUB-IN interventions may not be sufficient to robustly quantify the total size of agglomeration benefits in the Clusters. Further, city effort may not be sufficient.

Treatment: depending on their intervention specifics, cities may use case studies and anecdotal evidence to support a qualitative assessment on agglomeration, for example any indication that similar firms within the cluster all experience growth together, or by the arrival of additional similar firms/activities.

Leakage is relevant (pilot dependent)

Relevance: it is possible that some of HUB-IN’s benefits leak out of the HUA and target industries. For example, jobs created that get filled by workers from outside the HUA, or improvements to living conditions that go to affluent incomers from outside the HUA.

Treatment: depending on their intervention specifics, cities may:

1. ...gain quantitative understanding of the proportion of **jobs filled by local HUA residents**
2. ...gain qualitative insight into whether benefits of induced expenditure (when employees spend their income on goods and services) are expected to occur within or outside the HUA, based on findings of the above.
3. ...consider the impact indicators proposed on **gentrification**, to gain a blend of quantitative and qualitative insights on how the regeneration of the area benefits affluent incomers as opposed to local communities.

Optimism bias relevant in few cases

Relevance: forecasts occur in the SME survey on expected jobs and turnover over the next three years.

Treatment: based on similar studies of SME’s over and underperforming against their own forecasts, an assumption can be applied that only 80% of estimated growth will be realised.²⁴

INTERVENTION EFFECT

TREATMENT ON HUB-IN

INDUCED EFFECTS: *changes in outcomes outside of the target population group, due to effects along business value chains, altered business environments etc*

Spill-over effects

The impacts of economic activity (sometimes called externalities) that affect economic actors (public sector, private sector, communities) that are not directly undertaking or involved in the intervention. For example, if Belfast's Hub attracts more international visitors to its HUA who then go on to also visit the Giant's Causeway.

Spill-over effect monitored by case studies

Relevance: spill-over effects are a natural effect of place-based interventions such as HUB-IN.

Treatment: cities will not quantify spill-over effects within their available effort, but may qualitatively recognise that their interventions can have them spill-over collect evidence of them: case studies or anecdotal evidence can support this.

See also: Agglomeration

Displacement effect

The degree to which an increase in economic activity or social welfare that is promoted by an intervention is offset by reductions elsewhere, that are also due to the intervention.³²

For example, if businesses simply change location to the HUA due to HUB-IN – overall there are no net benefits, but there is displacement and redistribution of existing benefits. This is a noted market distortion of public interventions, and found to be higher risk on interventions in local and/or regional markets.

Displacement monitored by case studies

Relevance: as HUB-IN seeks to increase local entrepreneurship, it is a relevant consideration that some entrepreneurs may be displaced from alternative areas (rather than being created new).

Treatment: cities may use case studies and anecdotal evidence to support a qualitative assessment on displacement.

Externalities

[see Spill-over effects]

Gentrification

The phenomenon whereby local inhabitants are displaced by more affluent householders / occupants is one of the challenges HUB-IN directly cites as needing addressed in HUAs.

"Gentification" monitored on some pilots

Relevance: there is often a trade-off between regeneration and gentrification: by its nature, regeneration makes an area more attractive to live, work and play → more attractive areas see increased demand for housing → an increase in the demand for housing puts pressure on the limited housing supply → this change in demand and supply creates an upwards pressure in prices that makes the residential properties less affordable to the local inhabitants → local inhabitants are displaced by more affluent incomers.

Thus, it is unlikely that regeneration will "solve" or reverse gentrification in the HUAs. However, displacement can be mitigated to some extent through social inclusion and policy-driven tools. Figure 13 below illustrates a policy-driven optimum of slowed and

balanced gentrification. It illustrates that policy nudges and interventions (such as HUB-IN) can be used to enable a balance of maximum diversity and optimal wealth within a housing market – slowing displacement and abandonment.

Treatment: depending on their intervention specifics, cities may capture a balance of trend data on real estate prices, the availability of affordable housing, demographics of housing occupants and qualitative feedback. This can provide some insights on the slowing down and balancing of gentrification that has been coined by others as “gentlyfication”,²⁵ as depicted in Figure 13 below.

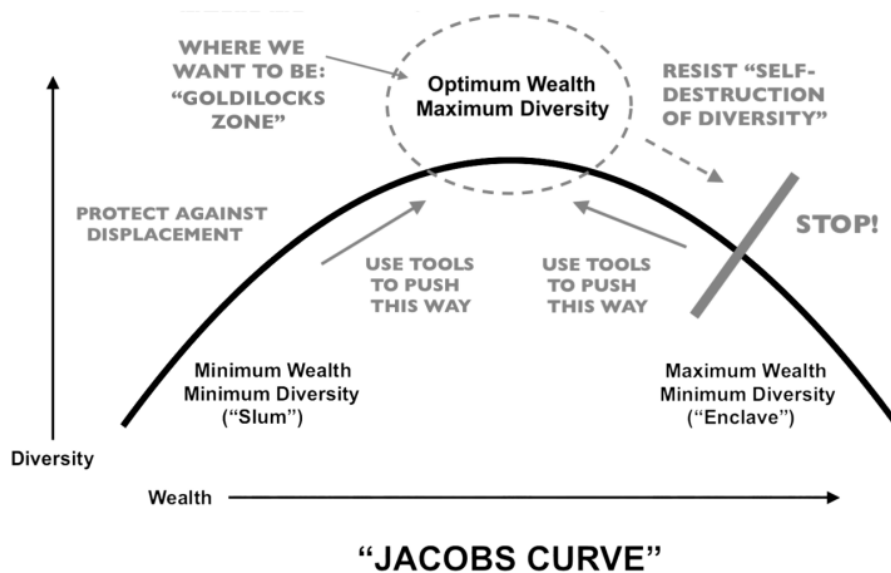


Figure 13: a depiction of the Jacobs Curve.³³ It indicates a policy-enabled optimum of maximum diversity and optimal wealth within a housing market – slowing displacement and abandonment.

FEEDBACK LOOPS: changes in outcomes over time due to the repeating nature of the intervention and / or its effects

2nd or 3rd order effects

Interventions often have downstream consequences on the local economic and social systems in which they take place, often in ways unintended or unanticipated. These can include positive and negative impacts, whether intended or unintended.

2nd / 3rd order effects to be considered

Relevance: HUB-IN is not a one-off intervention. Rather it is intended as an ongoing process of co-creation and entrepreneurship. This is reflected in the “Continuous Improvement” feedback loop within the project logic model in Figure 7 above. Thus 2nd / 3rd order effects are relevant.

INTERVENTION EFFECT

TREATMENT ON HUB-IN

However, the establishment of causal links between an intervention and its 2nd or 3rd order effects is methodologically complex, and not suitable for quantitative assessment on HUB-IN with the cities available effort.

Treatment: the monitoring and evaluation framework supports qualitative identification of feedback loops and 2nd or 3rd order effects by:

- **considerations of unintended impacts** via the D5.2 (tailored methodologies) logic model sessions with cities
- **ongoing check-ins** on findings from the interventions as they progress, via the D5.3 quarterly evaluation reports
- **an overall lesson learned** from the city pilots in the D5.4 final assessment report, where unexpected results can be assessed

Table 5: a summary of relevant intervention effects, an assessment of their relevance to HUB-IN and considerations for how they will (or will not) be treated on HUB-IN's impact evaluations.



9.3 Data collection guide – stakeholder focus group

The below templates are offered to assist cities in collecting the monitoring data. This exact format is not mandatory – cities are free to improve in any way that enables them to draw the relevant insights.

Purpose	To provide the city team with qualitative insights across the eight Ingredients and four Cultural and Institutional Arrangements of a HUB-IN Place: <ul style="list-style-type: none"> • EI1-2 extent to which cultural heritage is being preserved and unlocking value • EI3-2 barriers, enablers and opportunities in the entrepreneurial ecosystem
Invitees	At least 1 from each core stakeholder group in the city’s key stakeholder list (ideally of similar levels of power and decision-making to enable an inclusive discussion)
Frequency	Twice yearly for the first year, then move to once a year
Requirements:	1 facilitator 1 note-taker If face-to-face: a meeting place, sticky notes, pens, coloured stickers, whiteboard (or large poster) with space for sticky notes to be put on each ecosystem element. Also print pages 14-20 of the HUB-IN Framework - The Ingredients of a HUB-IN Place to assist attendees in familiarising with the HUB-IN entrepreneurial ecosystem elements. If online: the facilitator constructs an online whiteboard template (such as Miro) with space for digital sticky notes to be put on each ecosystem element. See Figure 14 below. The Stakeholder Survey (Appendix 9.4) is completed & evaluated before the session
Format	Face-to-face discussion (online discussion as a backup option), 120 mins ----- INTRODUCTION 5 mins – open the call Welcome attendees, set the purpose and agenda. Invite attendees to make introductions and share their own aims for the session 5 mins – explain the ecosystem model Briefly explain the entrepreneurial ecosystem and its elements (can refer attendees to the poster), and reiterate the goal of the local ecosystem to support your city’s HUB-IN Missions and Vision HUB). 10 mins – review action items from the last session Ask action owners for their update and next steps (ignore for the first session). Recap on the last session’s suggestions on “what went well” and “what can be improved” and how these have been incorporated. RATING THE ECOSYSTEM 10 mins – collect the perspectives of different stakeholders, to guide the discussion Direct attendees’ attention to the whiteboard (or large poster) that has each entrepreneurial ecosystem element with space for sticky notes. Guide the group through the traffic light rating steps: each attendee rates all ecosystem elements in one of the following categories: a. Currently enabling elements (mark with a green dot or +) b. Currently presenting barriers (mark with a red dot or -) c. Most opportunity for improvement (mark with a yellow dot or star) – maximum of two per attendee GROUP IDEATION AND DISCUSSION 20 mins – ideation Based on the ratings of each ecosystem element, identify the top 6 priority ecosystem elements to discuss first. i.e. this may be ones with all red dots, or with the most yellow dots etc. The “Heritage” element (the extent to which cultural heritage is being preserved and unlocking value) should always be one of the top 6, because this is a central element in the HUB-IN approach.

Invite attendees to spend 20 mins writing 'sticky notes' that explain the enabler / barrier / opportunity for these priority 6 elements and placing them on the poster:

- enablers (green sticky note)
- barriers (red sticky note)

20 mins – host a probing discussion

The facilitator hosts a discussion:

- 1) **The facilitator identifies the common ideas** by grouping together any sticky notes that are similar (e.g. if under "Finance" there are several sticky notes about SMEs lacking awareness on their options, group these together).
- 2) **The facilitator chooses the most important themes** to focus on, by identifying the comments with the highest impact and / or most sticky notes. The facilitator may also wish to guide discussion on other important topics that arose in the focus group or the network survey.
- 3) **The facilitator guides a group discussion on the lessons and next steps**, asking probing questions that prompt the group to discuss:
 - 1) scale of impact (i.e. how big of a problem / opportunity is it)
 - 2) consequences if nothing is done
 - 3) root cause(s)
 - 4) interconnectedness (e.g. do the attendee's observed barriers in networks link to the observed barriers in finance? How? etc)
 - 5) proposed next steps to resolve or improve the situation

The facilitator adds each agreed next step as a blue sticky note in the appropriate area, describing the action, owner and approximate due date.

40 mins - repeat the tasks above, but this time for the bottom 6 priority elements

WRAP UP

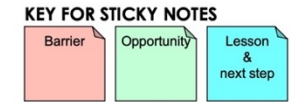
5 mins – summarise the actions to be revisited in the next session (blue sticky notes)

5 mins – assess if the attendees' aims were met and any suggestion for higher productivity in the next session: i) what went well, ii) what can be improved

Analysis

The City Team:

- digests the lessons and agrees prioritised actions for the upcoming quarter
- emails attendees with each agreed next step, owner and approximate timeframe, and that these will be reviewed in the next session



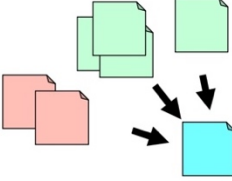
<p>Formal Institutions</p> <ul style="list-style-type: none"> empowering rules and regulations openness and inclusiveness of processes provision of space(s) for experimentation etc... 	<p>Urban Culture</p> <ul style="list-style-type: none"> intensity of activities (e.g. festivals, craft fairs) uniqueness of streets (e.g. architecture, street art) strength of values (e.g. sense of place, symbols) etc... 	<p>Entrepreneurial Culture</p> <ul style="list-style-type: none"> local attitudes towards sharing risk willingness to experiment on ideas chances for spontaneous, creative interactions etc... 	<p>Networks</p> <ul style="list-style-type: none"> density, inclusivity, effectiveness value of intracity connections value of intercity connections etc...
<p>Heritage</p> <ul style="list-style-type: none"> preserving cultural heritage developing cultural heritage unlocking value from cultural heritage etc... 	<p>Physical and Digital Infrastructure</p> <ul style="list-style-type: none"> facilities to support connectivity and cooperation physical (e.g. buildings, energy systems, transport) digital (e.g. websites, mobile apps) etc... 	<p>Marketplace / Demand</p> <ul style="list-style-type: none"> sufficient demand for products and services inclusivity of products and services unmet needs of citizens, businesses, visitors, env. etc... 	<p>Support Organisations</p> <ul style="list-style-type: none"> ideation: research institutes, academia innovation: incubators, accelerators, FabLabs cultural: cultural and public institutions etc...
<p>Human Resources</p> <ul style="list-style-type: none"> accessing local experience, skills and talent depth of expertise, craftsmanship and artisanship availability of high-quality training programmes etc 	<p>Knowledge</p> <ul style="list-style-type: none"> distribution of knowledge: for the few or the many flows of knowledge between experts and others investment in (re)generation of knowledge etc... 	<p>Leadership</p> <ul style="list-style-type: none"> visibility of visionary individuals or collectives partnerships that manage diverse interests progress towards a shared vision etc 	<p>Finance</p> <ul style="list-style-type: none"> availability and awareness of financial resources innovativeness of finance resources balance of power and influence, risk and reward etc

Figure 14: example layout for an online whiteboard to guide the focus group discussion. This format is an optional suggestion and is not mandatory – cities are free to improve in any way that enables them to draw relevant insights that meet the purpose of the focus groups.



9.4 Data collection guide – stakeholder survey

Purpose	To provide the city team with qualitative insights and quantitative scores of: <ul style="list-style-type: none">• EI1-1 case studies on outcomes and impacts• EI2-6 scores on network governance – inclusivity and effectiveness• EI3-2 commentary on intervention effects: agglomeration, deadweight etc• EI4-3 scores on intracity networks – density, diversity, spontaneity, value• EI4-4 scores on intercity networks – density, diversity, spontaneity, value
Invitees	A large panel from each group in the city’s key stakeholder list (including other projects and programmes in the Roadmap, incubators, accelerators and FabLabs, and their supported SMEs, non-profit organisations, community groups, formal institutions etc).
Frequency	Quarterly
Format	Online survey with data visualisation capabilities, ideally <15 mins to complete
Requirements:	Set up an online survey via a service that has the capability to provide individual and aggregated responses and to visualise the data (e.g. SurveyMonkey or similar)

Questions

INTRODUCTION

[City team writes a very short explainer on what the project is, what the specific activities are, the name of the HUA in local terminology and why it’s important to fill in this survey.]

In this survey, “cultural heritage” includes tangible heritage (monuments, archaeological sites, paintings, sculptures, landscapes etc) and intangible heritage (cultural identities, craft skills, oral traditions, performing arts, social practices, festive events etc). Local examples include: [to be added by City Team]

CULTURAL HERITAGE

On a scale of 1-5, how much do you agree with the following statements? (1 = very low, 5 = very high)

- “Cultural heritage in [local name for HUA] is a public liability / cost”
- “Cultural heritage in [local name for HUA] is a revenue-driving asset”
- “Cultural heritage in [local name for HUA] has untapped opportunities for innovation / business development.”

Please explain your answers above (optional).

CO-CREATION

Building effective networks

- 1) On a scale of 1-5, how would you score the **strength of the networks** within [name of the HUA]? (1 = very low, 5 = very high)
 - a. density (i.e. the number of connected people and organisations)
 - b. diversity (i.e. the breadth of connected people and organisations)
 - c. spontaneity (i.e. the frequency of spontaneous, creative interactions)
 - d. value (i.e. the contribution of those interactions to new products / services)

-
- 2) Please explain your answer above (optional)
 - 3) On a scale of 1-5, how would you score the **strength of the networks** with other cities? (1 = very low, 5 = very high)
 - a. density (i.e. the number of connected people and organisations)
 - b. diversity (i.e. the breadth of connected people and organisations)
 - c. spontaneity (i.e. the frequency of spontaneous, creative interactions)
 - d. value (i.e. the contribution of those interactions to new products / services)
 - 4) Please explain your answer above (optional)
 - 5) On a scale of 1-5, how would you score the **quality of the governance** within [name of the HUA]? (1 = very low, 5 = very high)
 - a. inclusivity (i.e. processes for considering diverse views)
 - b. effectiveness (i.e. able to make timely, relevant decisions)
 - 6) Please explain your answer above (optional)

Cross-fertilising ideas

- 7) What examples can you share on the HUB-IN **network in this city sharing ideas** that led to new products or services? Please describe the organisations involved, the potential product / service, the expected benefits and the development status.
- 8) What examples can you share on the HUB-IN **networks across other cities sharing ideas** that led to new products or services? Please describe the organisations involved, the potential product / service, the expected benefits and the development status.

PARTNER PROJECTS AND PROGRAMMES

[City team lists the full list of partner projects and programmes, as listed in the Roadmap plus any recent additions]

- 9) If you represent one of our local partner projects and programmes (listed above), how would you describe HUB-IN's current impact on your project or programme in general terms?
 - Strong positive impact
 - Light positive impact
 - Neither positive nor negative impact
 - Light negative impact
 - Strong negative impact
- 10) Please give examples of how HUB-IN is positively affecting your project or programme (if applicable).
[free text]
- 11) Please give examples of how HUB-IN is negatively affecting your project or programme (if applicable).
[free text]

-
- 12) Please give examples of how your project / organisation has changed its activities or approach due to HUB-IN (if applicable).
[free text]

INTERVENTION EFFECTS

This enables very high level assessment of intervention effects:

- agglomeration
- deadweight
- displacement
- leakage
- spill-overs

- 13) On a scale of 1-5, how would you score the extent to which HUB-IN activities lead to the below? (1 = very low, 5 = very high)
- positive effects from **physically clustering** HUB-IN organisations together? (“agglomeration”)
 - positively affect **areas outside of** [name of the HUA]? (“spill-overs”)
 - negatively affect **areas outside of** [name of the HUA]? (“spill-overs”)
 - simply **transfer benefits** from areas outside of [name of the HUA] into [name of the HUA] (i.e. no net benefits)? (“displacement”)
 - benefit businesses **outside of the creative, cultural or tourism sectors**? (“leakage”)
 - benefit local **communities outside of** [name of the HUA]? Ignore tourists for this question. (“leakage”)
 - provide benefits to [name of the HUA] that [name of the HUA] would likely receive anyway from **other existing programmes**? (“deadweight”)

- 14) Please briefly explain your scores for the question above.

CASE STUDIES

- 15) What **examples** can you share of positive or negative ways that HUB-IN activities have affected businesses, communities, environment or culture?

CLUSTERS OF INNOVATION

If you are an incubator, accelerator or other organisation that provides support to SMEs and start-ups, please answer this section. If not, please skip to the next section.

- 16) What is your **capacity** (i.e. how many SMEs and start-ups can work with your organisation at one time?)
- 17) What is your **current occupancy** (i.e. how many SMEs and start-ups are working with your organisation at the current time?)
- 18) What is the total **number of people** in the SMEs and start-ups that work with you?
- 19) What proportion of the SMEs that you currently work with are from the Creative and Cultural Sectors? i.e. NACE (Nomenclature of Economic Activity) codes:
- **Manufacturing**
 - C18 Printing and reproduction of recorded media
 - C32.12 Manufacture of jewellery and related articles
 - C32.2 Manufacture of musical instruments

- **Wholesale and retail trade**
G47.61 Retail sale of books in specialised stores
G47.62 Retail sale of newspapers and stationery in specialised stores
G47.63 Retail sale of music and video recordings in specialised stores
- **Publishing activities**
J58.11 Book publishing
J58.13 Publishing of newspapers
J58.14 Publishing of journals and periodicals
J58.21 Publishing of computer games
- **Information and communication**
J59 Motion picture, video and television programme production, sound recording and music publishing activities
J60 Programming and broadcasting activities
J63.91 News agency activities
- **Professional, scientific and technical activities**
M71.11 Architectural activities
M74.1 Specialised design activities
M74.2 Photographic activities
M74.3 Translation and interpretation activities
- **Administrative and support service activities**
N77.22 Renting of video tapes and disks
- **Arts, entertainment and recreation, e.g.**
R90 Creative, arts and entertainment activities
R91 Libraries, archives, museums and other cultural activities

Response option		Numeric value, for assessor's use only
<input type="checkbox"/> None at all	(0%)	0%
<input type="checkbox"/> Some	(26-50%)	37.5%
<input type="checkbox"/> Most	(51%-75%)	62.5%
<input type="checkbox"/> Almost all	(76%-99%)	85.5%
<input type="checkbox"/> All	(100%)	100%
<input type="checkbox"/> Don't know		apply average response

20) What proportion of the SMEs that you currently work with are operating in these HUB-IN thematic areas:

- [describe your city's priority Mission]
- [describe your city's priority Mission]

Response option		Numeric value, for assessor's use only
<input type="checkbox"/> None at all	(0%)	0%
<input type="checkbox"/> Some	(26-50%)	37.5%
<input type="checkbox"/> Most	(51%-75%)	62.5%
<input type="checkbox"/> Almost all	(76%-99%)	85.5%
<input type="checkbox"/> All	(100%)	100%
<input type="checkbox"/> Don't know		apply average response

ABOUT THE RESPONDENT

This enables:

- a) city team to understand the spread of views by stakeholder group
- b) probe further if desired

21) Which organisation type do you represent on HUB-IN?

- a. public sector
- b. private sector – large corporate
- c. private sector – SME (Small or Medium Enterprise) or start-up
- d. private sector – finance
- e. academia
- f. community group
- g. other (please describe)

22) What is the name of the organisation that you represent on HUB-IN? (optional)

23) If you are happy for us to consult you on your experiences with HUB-IN, please provide your email address (optional)

Analysis

The City Team...

- **...for the free text entries:** collates the relevant and useful entries into case studies on their HUB-IN intervention and captures these in the quarterly dashboard
- **...in general:**
 - identifies areas of poor performance, barriers or opportunities to probe further in the network focus group
 - identifies learnings on what is working well, what can be improved and how



9.5 Data collection guide – SME survey

Purpose	To provide the city team with quantitative scores of: <ul style="list-style-type: none">• E11-10 acceleration of supported SMEs: jobs, revenues, finances, skills etc
Invitees	SMEs supported by the HUB-IN support programmes N.B. the HUB should maintain separate distribution lists of the groups of SMEs that start in each quarter (i.e. each “cohort”), and issue the survey to them separately. This is to enable easy matching of “pre-support” and “post-support responses”.
Frequency	As soon as the SMEs are selected to work with the programme, then annually
Format	Online survey with data visualisation capabilities (<15 mins to complete)
Requirements:	Set up an online survey via a service that has the capability to provide individual and aggregated responses and to visualise the data (e.g. SurveyMonkey or similar). Set a formal condition for SMEs in the programme to complete the surveys. The City team assesses the results for further probing in the Network Focus Group.

Questions

INTRODUCTION

[City team writes a very short explainer on what the project is, what the specific activities are, the name of the HUA in local terminology and why it’s important to fill in this survey.]

CONTEXT

1) Is this the first time your organisation has completed this survey?

- yes
- no

2) Which organisation type do you represent on HUB-IN?

- public sector
- private sector – large corporate
- private sector – SME (Small or Medium Enterprise) or start-up
- private sector – finance
- academia
- community group
- other (please describe)

3) Which of these cultural sectors does your organisation operate in?
[Based on EU NACE (Nomenclature of Economic Activities) codes]. 27 28

- Manufacturing
 - C18 Printing and reproduction of recorded media
 - C32.12 Manufacture of jewellery and related articles
 - C32.2 Manufacture of musical instruments
- Wholesale and retail trade
 - G47.61 Retail sale of books in specialised stores
 - G47.62 Retail sale of newspapers and stationery in specialised stores
 - G47.63 Retail sale of music and video recordings in specialised stores
- Publishing activities
 - J58.11 Book publishing
 - J58.13 Publishing of newspapers
 - J58.14 Publishing of journals and periodicals
 - J58.21 Publishing of computer games
- Information and communication
 - J59 Motion picture, video and television programme production, sound recording and music publishing activities
 - J60 Programming and broadcasting activities

This enables:

- a) city teams to understand the spread of innovation across these sectors
- b) city teams to easily filter out non-cultural or non-creative sector SMEs
- c) assessment of leakage effect

J63.91 News agency activities

- Professional, scientific and technical activities
 - M71.11 Architectural activities
 - M74.1 Specialised design activities
 - M74.2 Photographic activities
 - M74.3 Translation and interpretation activities
- Administrative and support service activities
 - N77.22 Renting of video tapes and disks
- Arts, entertainment and recreation, e.g.
 - R90 Creative, arts and entertainment activities
 - R91 Libraries, archives, museums and other cultural activities
- Other (in the cultural and creative sectors)
- Other (not in the cultural or creative sectors)

4) Which of these “HUB-IN Clusters” does your organisation target?

- Cluster 1: Culture and Creative Industries**
Innovative products and services (multimedia, design and fashion); adaptive reuse of traditional skills (traditional food, craft industry, entertainment, local commerce); cultural and creative tourism (unique user experiences, creative work combining business and leisure, social connectivity, destinations as hubs)
- Cluster 2: New Lifestyles**
Consumption and presumption (circular services, local energy communities, local food, sharing economy); living and mobility (co-living, public spaces for culture, accessibility, mobility, micro-logistics, green buildings, zero emission zones); health and wellbeing (migrants, community wellbeing, nature-based solutions for health, public spaces for health and happiness, cultural memory)
- Cluster 3: Resilient & Human Connected Places**
Environmental balance (climate resilience, energy transition, local food production, circular cities, nature-based solutions, resource efficiency); empowering communities (participatory processes, migrant integration, local economy, social cohesion); livable and connected places (urban design, reuse of spaces and building, smart cities, cultural requalification, sense of place, digitalisation, immersive technology, urban regeneration, data science)

5) Please briefly describe the main vision and product / services of your organisation.
[free text]

6) Does your organisation directly contribute to any of the HUB-IN project's stated Missions?

- [name of Mission 1]
- [name of Mission 2]
- [name of Mission 3]
- [name of Mission 4]

7) If you selected any Missions, please explain.
[free text]

-
- 8) Does your organisation directly contribute to any of the HUB-IN project's stated impacts?
- Expected Impact 1:**
Reversing trends of abandonment and neglect of historic heritage in urban areas and landscapes
 - Expected Impact 2:**
New and tested blueprints for the socially and economically viable regeneration of European HUAs and cultural landscapes, with enhanced well-being and quality of life, social cohesion and integration.
 - Expected Impact 3:**
Boosted heritage- and culture-relevant innovation, creativity, entrepreneurship and light 'reindustrialization' of HUAs and cultural landscapes
 - Expected Impact 4:**
Cross-sector collaboration, creation of job opportunities and skills in cultural and creative sectors and innovative manufacturing linked to historic heritage
- 9) If you selected any impacts, please explain.
[free text]
- 10) Is your place of operations within [name of the HUA]?
- yes
 - no

PRE-ACCELERATOR PROGRAMME

Please answer these questions for the previous financial year before you were supported by the HUB-IN Accelerator programme

- 11) Approximately how many full-time equivalents (FTE) did you employ at year-end?
[free text, numbers only]
- 12) Approximately what proportion of the jobs were only seasonal jobs (i.e. they peak at certain times and staff are hired only for those peaks)?
- 0-20%
 - 21-40%
 - 41-60%
 - 61-80%
 - 81-100%
- 13) Approximately what proportion of the jobs were paid (i.e. not unpaid or low-paid interns)?
- 0-20%
 - 21-40%
 - 41-60%
 - 61-80%
 - 81-100%
- 14) Approximately what proportion of the paid jobs were above minimum wages?
- 0-20%
 - 21-40%
 - 41-60%
 - 61-80%
 - 81-100%

15) Approximately what was the average salary per employee?

[Drop down, number]

- €0 - €10,000
- €10,001 - €20,000
- €20,001 - €30,000
- €30,001 - €40,000
- €40,001 - €50,000
- €50,001 - €60,000
- €60,001 - €70,000
- €70,001 - €80,000
- €80,001 - €90,000
- €90,001 - €100,000
- €100,001+
- Don't know
- Prefer not to say

16) Approximately what proportion of your organisation's funding / financing came from public sector grants and funds?

[Dropdown, number]

- 0-20%
- 21-40%
- 41-60%
- 61-80%
- 81-100%
- Don't know
- Prefer not to say

17) Approximately what proportion of your organisation's funding / financing came from private sector investment?

[Dropdown, number]

- 0-20%
- 21-40%
- 41-60%
- 61-80%
- 81-100%
- Don't know
- Prefer not to say

18) Have you applied any of the innovative finance models from the HUB-IN support materials?

- Yes, we have applied
- No, but we are interested
- No, we are not interested / they are not relevant

19) Please explain your answer.

[free text]

20) Have you applied any of the innovative governance models from the HUB-IN support materials?

- Yes, we have applied
- No, but we are interested
- No, we are not interested / they are not relevant

21) Please explain your answer.

[free text]

22) Have you applied any of the innovative business models from the HUB-IN support materials?

This enables assessment of transition from dependency on grants towards commercial viability

-
- Yes, we have applied
 - No, but we are interested
 - No, we are not interested / they are not relevant

23) Please explain your answer.
[free text]

24) Approximately what was your total revenue for the year?
[Dropdown, number]

- €0
- €1 - €10,000
- €10,001 - €25,000
- €25,001 - €50,000
- €50,001 - €100,000
- €100,001 - €250,000
- €250,001 - €500,000
- €500,001 - €1,000,000
- £1,000,001+
- Don't know
- Prefer not to say

25) Approximately what was your expenditure for the year?
Dropdown, number]

- €0
- €1 - €10,000
- €10,001 - €25,000
- €25,001 - €50,000
- €50,001 - €100,000
- €100,001 - €250,000
- €250,001 - €500,000
- €500,001 - €1,000,000
- £1,000,001+
- Don't know
- Prefer not to say

26) Approximately what percentage of your expenditure goes to businesses that have their main operations in [name of the HUA]?

- 0% - 25%
- 25 - 50%
- 50% - 75%
- 75 - 100%
- Not sure

This enables high level assessment of indirect expenditure

27) Approximately what percentage of your employees lived in [name of the HUA]?

- 0% - 25%
- 25 - 50%
- 50% - 75%
- 75 - 100%
- Not sure

This enables high level assessment of inclusivity and induced expenditure

28) Did your entity train anyone that year? If so, approximately how many FTE?
[Free text, numbers only]

29) Thinking of your core product or service, how would you grade its technology readiness level? (TRL)

1. Basic principles observed
2. Technology concept formulated
3. Experimental proof of concept
4. Technology validated in lab (Bench scale)
5. Technology validated in relevant environment (Pilot scale)
6. Technology demonstrated in relevant environment (Large scale prototype)
7. System prototype demonstration in operational environment
8. System complete and qualified
9. Actual system proven in operational environment

This enables city team to probe further if desired

ABOUT THE RESPONDENT

30) Please enter your Company Registration Number (the purpose is solely that we can match your responses here to your responses in earlier / later surveys, in order to assess the extent of HUB-IN's support). For example see <https://e-justice.europa.eu/searchBris.do>

31) If you are happy for us to consult you on your experiences with HUB-IN, please provide your email address (optional)

POST-ACCELERATOR PROGRAMME

[To be sent each year after Accelerator starts]

[To include the same questions as for the "pre-accelerator survey" above, plus...]

Future forecasts suffer from optimism bias. Therefore an assumption will be applied that only 80% of estimated growth will be realised (London & Partners, 2018)

32) How many full-time employees are you expecting to employ over the next 3 years?

1. This financial year [free text]
2. Next financial year [free text]
3. The following financial year [free text]

33) What are your expected revenue forecasts over the next 3 years?

1. This calendar year [free text]
2. Next calendar year [free text]
3. The following calendar year [free text]

We would like to ask some questions to evaluate the value of the support received by the HUB-IN Accelerator programme. This relates to reported changes in jobs and turnover etc since working with the HUB-IN Accelerator programme.

This enables assessment of additionality

34) What proportion of the changes was purely as a result of working with the HUB-IN Accelerator?

Response option		Value, for analyser's use only
<input type="checkbox"/> None at all	(0%)	0%
<input type="checkbox"/> Not very much	(1-25%)	12.5%
<input type="checkbox"/> Some	(26-50%)	37.5%
<input type="checkbox"/> Most	(51%-75%)	62.5%
<input type="checkbox"/> Almost all	(76%-99%)	85.5%
<input type="checkbox"/> All of it	(100%)	100%
<input type="checkbox"/> Don't know		Apply average response

This enables assessment of deadweight

35) What do you think would have happened had you not received support from the HUB-IN Accelerator programme?

Response option	Value, for analyser's use only
<input type="checkbox"/> We would have obtained the same support in the same timeframe with a different provider	0%
<input type="checkbox"/> We would have obtained the support with a different provider, but at a later time	20%
<input type="checkbox"/> We would have obtained the support with a different provider but they would have been of a lower quality	50%
<input type="checkbox"/> We would not have obtained the support with a different provider	100%

This enables assessment of displacement

36) If your firm ceased operations, what proportion of your turnover would be taken up by your competitors in [name of the HUA]?

Response option	Value, for analyser's use only
<input type="checkbox"/> None at all (0%)	100%
<input type="checkbox"/> Not very much (1-25%)	85.5%
<input type="checkbox"/> Some (26-50%)	62.5%
<input type="checkbox"/> Most (51%-75%)	37.5%
<input type="checkbox"/> Almost all (76%-99%)	12.5%
<input type="checkbox"/> All of it (100%)	0%
<input type="checkbox"/> Don't know	Apply average response

Many thanks for your time completing this survey, this will help the development of [name of HUA].

Analysis

The City Team compares pre- and post-support responses.



9.6 Data collection guide – community survey

Purpose	To provide the city team with quantitative and checklist insights on: <ul style="list-style-type: none">• E11-3 leading and lagging HUA characteristics• E11-5 communities' sense of place, belonging and participation
Invitees	Panel drawn from community groups in the city's Roadmap
Frequency	Quarterly
Requirements:	the WP7-WP4 place brand monitoring plan, as inputs on HUA characteristics
Format	

INTRODUCTION

[City team writes a very short explainer on what the project is, what the specific activities are, the name of the HUA in local terminology and why it's important to fill in this survey.]

In this survey, “cultural heritage” includes tangible heritage (monuments, archaeological sites, paintings, sculptures, landscapes etc) and intangible heritage (cultural identities, craft skills, oral traditions, performing arts, social practices, festive events etc). Local examples include: [to be added by City Team]

HUA LIVABILITY

Thinking of your experience of living in [name of the HUA]:

- 1) Overall do you think your neighbourhood is a **good or a bad place** to live?
 1. *good
 2. bad
 3. mixed

Please explain your answer (optional)

SOCIAL COHESION

Thinking of your experiences in [name of the HUA], how strongly do you agree with the below statements?

- 2) **I feel like I belong** to this neighbourhood
 1. *strongly agree
 2. *agree
 3. neither agree/disagree
 4. disagree
 5. strongly disagree
- 3) I regularly stop and **talk with people** in my neighbourhood
 1. *strongly agree
 2. *agree
 3. neither agree/disagree
 4. disagree
 5. strongly disagree
- 4) If I needed advice about something I **could go to someone** in my neighbourhood
 1. *strongly agree
 2. *agree
 3. neither agree/disagree
 4. disagree
 5. strongly disagree

Please explain your answers above (optional)

SOCIAL PARTICIPATION AND ACTION

- 5) Do you **attend local voluntary groups** at least once a month?
1. *yes
 2. no
- 6) I feel that what happens to me is out of my **control**
1. often
 2. sometimes
 3. *not often
 4. *never
- 7) Approximately how many times have you participated in cultural activities (e.g. visited a museum, attended a traditional festival, or other activities) in the last 12 months?
[open text, numbers only]

GENTRIFICATION AND NEGLECT

On a scale of 1-5, how much do you agree with the following statements?
(1 = very low, 5 = very high)

- “[Local name for HUA] is an affordable place to live.”
- “[Local name for HUA] has problems with housing quality.”
- “[Local name for HUA] has problems with abandonment.”

Please explain your answers above (optional).

HUA CHARACTERISTICS AND SYMBOLIC MEANING

- 8) Which of these words accurately describe [name of the HUA] in your view?
- [Characteristic 1]
 - [Characteristic 2]
 - [Characteristic ...] etc
- 9) Please enter a word that describes **what’s good about** [name of the HUA] in your view.
- 10) Please enter a word that describes **what’s bad about** [name of the HUA] in your view.
- 11) In your own words, what difference has the [name of local HUB-IN intervention] made to **your life?**”

This enables city teams to understand how HUB-IN affects the symbolic meanings of the HUA (the cultural “glue”) to residents, and gives quotes on their experiences

HUB-IN'S CONTRIBUTION

We would like to ask some questions to evaluate the value of the HUB-IN project. This relates to reported changes in your answers since the HUB-IN project began.

This enables assessment of additionality

- 12) What proportion of the changes was **purely as a result** of the [locally recognisable name for the HUB-IN activities]?
- | Response option | | Numeric value, for analyser's use |
|--|-----------|-----------------------------------|
| <input type="checkbox"/> None at all | (0%) | 0% |
| <input type="checkbox"/> Not very much | (1-25%) | 12.5% |
| <input type="checkbox"/> Some | (26-50%) | 37.5% |
| <input type="checkbox"/> Most | (51%-75%) | 62.5% |
| <input type="checkbox"/> Almost all | (76%-99%) | 85.5% |
| <input type="checkbox"/> All of it | (100%) | 100% |
| <input type="checkbox"/> Don't know | | Apply average response |

This enables assessment of deadweight

- 37) What do you think would have happened if there had not been the [locally recognisable name for the HUB-IN activities]?
- | Response option | Numeric value, for analyser's use |
|--|-----------------------------------|
| <input type="checkbox"/> We would have seen the same changes in the same timeframe from different programmes | 0% |
| <input type="checkbox"/> We would have seen the same changes from different programmes, but at a later time | 20% |
| <input type="checkbox"/> We would have seen changes from different programmes, but they would have been of a lower quality | 50% |
| <input type="checkbox"/> We would not have seen the same changes | 100% |

This enables city team to understand the differences in responses within different communities, if relevant

ABOUT THE RESPONDENT

- 13) Do you consider yourself part of any of these communities?
- [name of community – e.g. “Alfama” in Lisbon]
 - [name of community – e.g. “Mouraria” in Lisbon]
 - [name of community – etc.]
 - other
- 14) Which of the following genders describes how you think of yourself?
- Male
 - Female
 - In another way
 - Prefer not to say
- 15) Please enter your age.
[free text, numbers only]
- 16) Please choose one option that best describes your ethnic group or background
- [as determined relevant by the city team / national standards]
 - [as determined relevant by the city team / national standards]
 - [as determined relevant by the city team / national standards]

-
- 17) What is the highest qualification you have?
- [as determined relevant by the city team / national standards]
 - [as determined relevant by the city team / national standards]
 - [as determined relevant by the city team / national standards]
- 18) Which of these categories best describes what you mainly do at the moment?
- Working full time - employee (30+ hours)
 - Working full time - self-employed (30+ hours)
 - Working part time - employee (8-29 hours)
 - Working part time - self-employed (8-29 hours)
 - Unemployed and actively seeking work
 - On a government sponsored training scheme
 - A full time student or pupil
 - Looking after the family or home
 - Not working because temporarily sick or injured
 - Not working because long-term sick or disabled
 - Retired from paid work
 - None of these
- 19) If you are happy for us to consult you on your experiences with [locally recognisable name for the HUB-IN activities] please provide your email address (optional)

Analysis

The City Team compares results of the pre- and post-intervention surveys.



9.7 Data collection guide – city team knowledge

As per Figure 10 (common city indicators) above, some indicators can be sourced from the city team's knowledge and entered directly into the quarterly reporting dashboard:

- EI1-4 SME's access to innovative finance
- EI1-11 learnings on HUB-IN's relevance, coherence, effectiveness, efficiency etc
- EI2-9 number of external local projects linked to the pilot for cross-fertilisation
- EI2-10 examples and perceptions on the value of cross-fertilisation activities
- EI4-8 financial leverage to ensure HUB-IN pilots' activities beyond project lifespan

For SUS2, definitions are provided below along with exploratory questions help the city team uncover relevant findings in their discussions and enter into the dashboard with supporting commentary:^{3 15}

Relevance

The extent to which the intervention's objectives and design remain consistent with changes (if any) in beneficiaries' requirements, country needs, city priorities and partners' and donors' policies. City teams may ask themselves:

- Does the intervention respond well to emerging needs and priorities?
- What is the quality of the intervention's design?
- How has it adapted over time?

Coherence

The compatibility of the intervention with other interventions in the HUA and CCI sectors.

- How well does the intervention align with our city's wider policy framework?
- How well does the intervention align with external policy commitments?

Effectiveness

The extent to which the intervention's processes are progressing well and on target.

- What is the extent of inclusiveness and equity amongst HUA communities?
- What is the extent of inclusiveness and equity amongst beneficiary groups? (along terms of gender, disability, ethnicity, sexuality, social class and more)
- What factors are influencing the success of our processes? (e.g. management; human, financial or regulatory aspects; modifications; deviation from plans etc).

Efficiency

The extent to which resources (funds, time etc) are cost-effectively converted to results.

- How well is the intervention converting inputs into results in cost-efficient ways?
- Are human and financial resources being used as planned (or misallocated etc)?
- Are resources being redirected as needs changed? Are risks being managed?

Impact

The extent of positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.

- Has the intervention led to any unexpected effects? If yes, please explain.
- How well is the intervention driving transformational change (i.e. addressing root causes as opposed to just tackling the symptoms).

Sustainability

The extent to which benefits (are expected to) continue from an intervention after the major development assistance has been completed.

- How well is the intervention strengthening our systems and institutions?
- What is the probability of continued long-term benefits?
- Do we have resilience to risks affecting the future benefit flows?



9.8 Data collection guide – WP4 data

The city teams will need to obtain relevant indicator data from their relevant contact WP4 contact for:

- the Action Plans
- the Modular Implementation Packages 1,2, and 3
- the GeoTool

From the Action Plans

- E11-11 # of local associations and local community groups committed with HUB-IN
- E12-7 # of local stakeholders participating in the Action Plans, per workshop

From the “Modular Implementation Packages”

- E11-12 # of ideation sessions or prototyping designed and developed in each city
- E11-13 # of initiatives designed & developed for the regen. of places & people
- E12-8 % of women and elderly residents engaged in regen. of places and people, per initiative
- E13-4 # of ideas or solutions explored or prototyped during the invention process
- E13-5 # of ideas or solutions explored during the accelerator programs
- E14-7 # of products or services developed during the accelerator programs

From the GeoTool

- E11-7 # of unique GeoTool survey responses, per survey
- E11-8 # of views of each city’s GeoTool website

9.9 Data collection guide – survey good practice

This appendix outlines good survey practice and how it can be applied by HUB-IN city teams, for readers who wish to further explore the potential trade-offs between the accuracy and representativeness of results, and project time and effort constraints.

The Total Survey Error (TSE) framework posits several kinds of error that can affect the accuracy and usability of survey.³⁴ These cover the extent to which...

Sampling errors

<i>sampling scheme</i>	...the sample does not map to the population
<i>sampling size</i>	...the sample size differs from the population
<i>estimator choice</i>	...results differ from the “true” population data

Study errors

<i>specification error</i>	...the questions inadequately represent the research needs
<i>frame error</i>	...the sample was drawn from the wrong population data
<i>nonresponse error</i>	...the respondents are unable or unwilling to return results
<i>measurement error</i>	...the respondent draws on incorrect data or misleading questions
<i>processing error</i>	...the assessors make errors in data cleaning or analysis

Pragmatically, the TSE framework recognises that projects operate within tight constraints across time and effort, and thus recommends that major sources of error are identified and resources allocated to reduce their errors to the extent possible, while still operating within the specified costs and effort boundaries.

Thus the aim is not to conduct the “perfect” survey at any cost, but one appropriate to the research needs and commensurate with the project’s reality. By appropriately accounting for the above errors, surveyors can expect a number of dimensions to contribute to quality of the results, including:³⁵

Quality dimensions

<i>accessibility</i>	the data is user friendly
<i>accuracy</i>	the total survey error is minimised
<i>credibility</i>	the data and results are considered trustworthy
<i>comparability</i>	valid demographic, spatial, temporal comparisons can be made
<i>punctuality</i>	the data is delivered on schedule
<i>relevance</i>	the data satisfies the assessor’s needs
<i>usability</i>	the data is well-organised, managed and clear

MINIMISING SAMPLING ERRORS

To minimise the sampling errors and their associated pitfalls such as selection bias etc, the below methods can be considered for conducting a survey:

Probability Sampling Methods

...whereby every individual within the population has a probability of being sampled, thus ensuring (variations of) representation of the entire population. These methods reduce sampling bias, ensure representation and increase accuracy.

Simple Random	Individuals are selected at random, giving each member of the population an equal chance of being selected. <i>Pros: every individual has the same chance of being selected</i>
Stratified random	The population is first divided into groups relevant to the intervention, e.g. age, gender, location etc. Then each group undergoes random sampling to select individuals. <i>Pros: ensures important groups are all represented</i>
Systematic	The population is ordered and individuals are selected at regular intervals, e.g. every 100 th person on the electoral roll. <i>Pros: the population is sampled evenly</i>
Cluster	The population is first divided into natural grouping (e.g. by location). Then random sampling is used to select groups. The individuals within those sampled groups are surveyed. <i>Pros: low cost & convenient for sampling larger populations</i>
Multistage	Combinations of the above, as needed by the circumstances

Non-Probability Sampling Methods

...whereby individuals are sampled based on specific criteria and the assessor's capabilities, rather than theory of probability. These methods can help to overcome limited data, assist qualitative and exploratory research and be more time effective.

*Convenience	Individuals are selected based on the assessor's ease of access to them. <i>Pros: low cost and convenient</i>
*Judgment / purposive	Individuals are selected if they meet specific criteria (e.g. they are a CEO of an SME Accelerator in the HUA etc). <i>Pros: maximum convenience, leverages assessor's expertise</i>
Quota	Similar to stratified sampling (above), except each group is assigned a quota of how many individuals must be sampled. <i>Pros: eliminates over- or under-representation of groups</i>
Snowball	Each survey respondent refers the survey to additional respondents. <i>Pros: leverages networks, can access "hidden" communities</i>
*Voluntary	Individuals volunteer to take part in the survey. These respondents typically have a strong interest in the topic. <i>Pros: low cost and convenient</i>

Table 6: snapshot of sampling methods. Those most applicable to HUB-IN are marked with an *.

SELECTING A SAMPLING METHOD ON HUB-IN

When HUB-IN cities select a sampling method for their **community survey**, there are considerations on objectives and constraints that guide selection of the most appropriate method. The two options below require a trade-off between what levels of accuracy and representativeness (of the HUA) are needed, and what resource expenditure is practical.

Option 1:

Large scale survey invitation mailed out to randomly selected HUA residents

Pros:

- The scale and method provide statistically significant findings (i.e. can be considered accurate and representative of the HUA resident community)
- This method engages residents who may not be currently engaged in the cultural networks, which is an important group (i.e. reduces “selection bias”)

Cons:

- Time, cost and expertise required
- Privacy and trust: residents will be receiving named communications, and the municipality should consider if issues of privacy and trust are relevant. As a workaround, the invitation letter could go to unnamed households without using any personal identifiers (“Dear resident...”) with a generic link to the online survey.

Requirements of the cities:

- A contact list** of all HUA residents (or households) and their addresses
- Invitation mail-outs to 1,250 residents** (or households) with the invitation to the online survey. See Table 7 below for details of minimum number of mail-outs needed, based on an assumed 95% confidence level and 30% return rates for mail-out surveys. The table also include a smaller sample size if cities accept a smaller confidence level.

Cities may prefer digital only invitations: studies have found that online surveys can achieve a comparable response rate to mailed surveys if preceded by a mail notification.³⁶ However, care does need to be taken that households without internet access are not excluded from the survey and thus the results.

- Weighting of results to represent the key HUA groups**, either through conducting the “stratified random” probability-based sampling method prior to mailing out, or by weighting responses retrospectively depending on the extent that different groups were represented in responses.
- Cost:** cost of letters and mailing out (or contracting 3rd party to do so)
- Time:** conducting simple random selection of HUA residents; mailing out the invitations; preparing and analysing the online survey. To reduce data entry time and errors, it is recommended that any survey uses online surveys, not manual paper surveys. The invitation can be a paper letter but the survey should be online.
- Expertise:** conducting probability-based selection of residents with confidence

Margin of error	5%
Assumed return rate	30%

City	HUA population size (from Grant Agreement)	For 90% confidence level		For 95% confidence level	
		Number of responses needed	Minimum number of invitees needed	Number of responses needed	Minimum number of invitees needed
Belfast	16,000	268	893	375	1,250
Brasov	11,000	266	887	371	1,237
Genova	7,600	263	877	366	1,220
Grand Angouleme	15,000	268	893	375	1,250
Lisbon	9,310	265	883	369	1,230
Nicosia	9,300	265	883	369	1,230
Slovenska Bistrica	NA	-	-	-	-
Utrecht	0	-	-	-	-

Table 7: indicative samples size for cities for statistically significant results (i.e. that can be taken as representative of the general HUA population). Margin of error refers to how closely the sample results need to reflect the views of the actual HUA population, in terms of a range e.g. "plus or minus 5%". Confidence level refers to how confident the assessor can be that the population views lie within the sample's range, e.g. 90% confident (more specifically: if the survey was conducted 10 times then 9 of those 10 surveys would give a range that successfully contains the actual HUA population's views).

Option 2: Small scale survey issued to existing networks of HUA residents

Pros:

- The convenience (low effort) of leveraging existing networks
- Low cost as networks are likely have online contact details for their members that do not require paper invitations to be mailed out
- Low time and expertise requirements: no need to conduct random sampling etc
- Privacy and trust: respondents will be opting into the survey via networks they know and / or engage with, helping to reduce concerns around privacy and trust

Cons:

- The small scale and non-probability method do not enable statistically significant findings (i.e. findings can support qualitative assessments and provide useful insights, but can not be presented as representative of the entire HUA resident community)
- This method engages residents who are already engaged in cultural networks and therefore excludes other important groups such as those HUA residents who DON'T engage in cultural networks (i.e. it introduces "selection bias")

Requirements:

- Relationships with networks** who can distribute invitations to their HUA residents to opt into the online survey, and champion them to do so. This can include cultural networks, schools (that ask students to complete it as "homework" and bring it back to their family to complete), etc.
- However many responses are returned is what the cities will work with** – the more responses, the richer the insights, but as the findings will not be statistically significant, there is no minimum sample size.
- Time:** recruiting the networks and or their members to partake in quarterly surveys; preparing and analysing the online survey.

MINIMISING STUDY ERRORS

Once the sampling method is chosen, cities will need to minimise potential errors in specification, measurement and processing. To support this, this framework has set out the key research questions, proposed actual survey questions (with margin notes to map them to core project concepts) and suggested techniques to cities.

To minimise potential frame and non-response errors, it is recommended that suitable HUB-IN surveys draw on survey panels: stable groups of individuals drawn from relevant groups who are committed to responding to the surveys for a certain period of time, so that pre- and post-intervention responses can be compared meaningfully. This eliminates the need for respondents to enter personal identifiers (which have GDPR and privacy considerations and can reduce response rates). For example:

- **Stakeholder survey panel:** formed of all stakeholders in the stakeholder groups already identified. The stakeholder list as formed during Cultural Landscapes definition can be the input (plus any additional that the city teams identify).

HUB-IN's co-creation process to-date should have ensured that the stakeholders are bought in to the HUA's development – the city teams may wish to consider how their comms and engagement can keep this buy-in and momentum strong over time, as respondents who have an active stake in the HUA are more likely to return surveys. City teams may also consider making completing the surveys a formal condition of being in the HUB-IN governance network.

- **Stakeholder focus group panel:** formed of at least one representative from each core stakeholder group in the city's Roadmap's Governance section. They should be of sufficient seniority to represent their organisation, with sufficient experience in the HUA to give feedback on barriers and opportunities.
- **SME survey panel:** formed of SMEs supported by the HUB-IN accelerator programme. Responding to the annual / quarterly surveys should also be a formal condition of them receiving support from HUB-IN, in order to maximise the survey return rates and thus quality of data.
- **Community survey:** (if Option 2 has been selected from the two options above) this will be formed of the community groups mapped during the Cultural Landscapes (plus any additional that the city teams identify over time).

Panel members may need to be replaced at key points, to avoid loss of engagement over time. Some governmental panel surveys operate a quarterly survey whereby panel members stay in the sample for five consecutive quarters. i.e. a fifth of the sample is replaced each quarter. This gives an 80% overlap in the samples for each successive survey.³⁷ Given the small size of some HUAs, however, it may not be practical to replace 20% of the panel every quarter – this can be discussed with cities and WP5 in the D5.2 (tailored methodology) workshops.

To further minimise non-response errors, simple steps can be taken and some are presented below as recommended considerations for HUB-IN city teams:³⁸

- 1) **Include clear instructions** in survey communications and panel recruitment:
 - a. **Clearly communicate the relevance of HUB-IN** to their lives, and how the respondent will benefit personally from completing the questionnaire.
 - b. **Have the survey sponsored by someone they know**, either personally or by reputation, e.g. the mayor, or the chair of their community group etc.
 - c. **Give confidence on privacy**, with explanations of how anonymity is guaranteed or how personal data (if collected) will be used and deleted.
 - d. **Demonstrate two-way communication** by informing respondents on who they can contact (and how) if they have questions.
- 2) **Nudge responses when appropriate**. Sending two simple follow-ups can add as many as 35% more respondents. Four or more have negligible effect.
- 3) **Nudge in advance too**: advance contact, such as sending an email reminding respondents that the survey is coming, has similar effects to follow-up messages.
- 4) **Target reachable populations** who have time to spare. For example, if the online survey link can be posted in the invites to community group meetings, you will already have a captive and engaged audience during those meetings.
- 5) **Consider monetary / in-kind incentives**, such as a prize draw for shopping vouchers, special access to community events, advance sharing of results etc.
- 6) **Be considerate of respondents' time** and aim to balance depth of insight with time to complete the survey. After 10-20 minutes, surveys begin to see drop-offs.
- 7) **Avoid seasonal effects**: December breaks and summer holidays can see low response rates as respondents are travelling / prioritising personal commitments.

Further guidance to cities on surveys can take place in D5.2 (tailored methodologies).

9.10 Project KPIs not in scope for WP5

Contained with the Grant Agreement are project Key Performance Indicators (KPI). Some of these can be leveraged in the Common Impact Assessment Framework because they are relevant to pilot city interventions and form part of their theory of change – these have been included and referenced in Section 4.1 “Common indicators” above.

Others however are not relevant to city level monitoring and so are not part of the Common Impact Assessment Framework – the project co-ordination work package is responsible for how these indicators will be collected and which Work Package is responsible. Others have been excluded because there are issues with the practicality of collecting within the cities’ available effort and / or there are issues with baselining. See Table 8 below for these project KPIs.

Layer	Ref	Indicator	Unit	Grant Agreement	
				Target per city	Data collection mechanism
NA	Rationale: these are project-level KPIs, not relevant to city-level monitoring and evaluation				
		N° of cities within HUB-IN Alliance adopting the HUB-IN toolkit	#	x	WP6
		N° of follower cities that will be added to the project	#	x	WP6
		N° of participants (virtual or present) in HUB-IN Academy	#	x	WP6
		N° of cities and other stakeholders that will be engaged in HUB-IN Alliance through the signature of a MoU	#	x	WP6
		N° of local stakeholders participating in the co-creation workshops to co-design the tailored Roadmaps, per workshop	#	x	WP3 ENC
		N° of potential entities and cities to reach out through comms and dissemination activities, for sharing HUB-IN results	#	x	WP7
	Rationale: these are not practical to measure within cities' available effort and / or there are issues with baselining credibly				
		Increasing % of residents engaged with community heritage activities	%	x	NA
		Increasing % of activities in the Clusters	%	x	NA
		Increasing % of start-ups offering solutions or services related with the three Clusters	%	x	NA
		Increasing % of jobs resulting from innovation and readaption processes in the HUAs	%	x	NA

Table 8: project KPIs per the Grant Agreement that are not in scope for city-level monitoring and evaluation (i.e. for WP5 support). For those that are worded in a way that is not practical to credibly baseline (e.g. a % change in “jobs resulting from innovation”), viable alternative have been proposed and included in the list of indicators and appended surveys where possible.

HUB-IN

Many thanks to everyone who contributed to this report.

For further information on this report or other HUB-IN impact assessment activities, please contact Chris Taylor (WP5 lead) or Amarvir Singh-Bal at Connected Places Catapult. chris.taylor@cp.catapult.org.uk | amarvir.singh@cp.catapult.org.uk



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 869429.

CATAPULT
Connected Places