

## D5.2 Adapted Monitoring Methodology for Each Pilot City (Grand Angoulême)

*April 2023*



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

**PREPARED BY**

Chris Taylor (WP5)  
Connected Places Catapult  
chris.taylor@cp.catapult.org.uk

**WITH CONTRIBUTIONS FROM**

Paul-Hervé Lavessiere (Metropolitan Trails, Grand Angoulême), HUB-IN partner cities, work package partners and colleagues at Connected Places Catapult

**REVIEWED BY**

Vera Gregório (Lisboa E-Nova)  
Grit Hartung (Connected Places Catapult)

**HOW TO CITE THIS DOCUMENT**

Taylor C.,(2023). Adapted Monitoring Methodology to Each Pilot City (Grand Angoulême), 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This deliverable contains original unpublished work except where clearly indicated otherwise.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.



# 1. ABOUT HUB-IN

## 1.1. MISSION

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 the international agendas for Cultural Sustainable Development (UNESCO) and Cultural Heritage Strategy (Council of Europe).

In the first stage of HUB-IN, a network of Hubs of innovation and entrepreneurship will be developed in the HUAs of eight city partners (Belfast, Braşov, Genova, Grand Angoulême, Lisbon, Nicosia, Slovenska Bistrica, Utrecht) and in the second stage, the resulting methods and tools will be scaled up to a global network of HUAs in follower cities. The Hubs of Innovation and Entrepreneurship will test, demonstrate and pilot activities of co-creation and co-design in three main areas that hold potential for the Hubs' sustainable transformations: 1) Cultural and creative industries, 2) New lifestyles and 3) Endogenous Natural & Social Resources.

## 1.2. VISION

HUB-IN expects to contribute to reverse trends of abandonment and neglect of historic heritage 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.

## 1.3. CONSORTIUM



Δήμος Λευκωσίας  
Nicosia Municipality



Belfast  
City Council



Cyprus  
Energy  
Agency



Agency of Braşov for the  
Management of Energy and Environment



Universiteit Utrecht



ENERGYCITIES



AGÊNCIA DE ENERGIA E AMBIENTE DE LISBOA



CrowdfundingHub



NOVA SCHOOL OF  
SCIENCE & TECHNOLOGY



Connected Places



LISBOA  
CÂMARA MUNICIPAL

# Table of Contents

<b>1. ABOUT HUB-IN</b>	<b>3</b>
1.1. Mission	3
1.2. Vision	3
1.3. Consortium	4
<b>2. CONTEXT AND INPUTS</b>	<b>6</b>
2.1. About This Document	6
2.2. References to Other Project Documents	6
<b>3. OVERALL MONITORING APPROACH</b>	<b>7</b>
3.1. Key HUB-IN Elements	7
3.2. Theory of Change	8
3.3. Monitoring Materials	10
<b>4. TAILORED MONITORING PLAN</b>	<b>11</b>
4.1. The Expected Outcomes and Logic Model	11
4.2. Prioritised Outcomes	14
4.3. Methodology	16
4.4. “Common” Indicators	21
4.5. Feedback Loops (Quarterly Hub Review and Report)	22
4.6. Risk and Limitations	23
<b>5. RESPONSIBILITIES &amp; NEXT STEPS</b>	<b>24</b>
<b>6. APPENDIX</b>	<b>25</b>
6.1. Indicators and Data Collection Details	25
6.2. Indicators by Economic, Environmental, Social, Cultural Dimension	27

## 2. CONTEXT AND INPUTS

### 2.1. ABOUT THIS DOCUMENT

This document proposes the methodology for understanding and improving the benefits of Grand Angoulême's Hub over time. It sets out an overview of the theory underpinning the monitoring approach (including quantitative and qualitative techniques operating at different levels) and a detailing of specific indicators and their data collection processes.

Each city is responsible for its own data collection, analysis and reporting, with a nominated point of contact to carry this out. This guide is therefore intended to support the city's nominated person in this regard, as a granular handbook for monitoring their Hub and developed in parallel to their developing their action plans with key stakeholders.

The document draws on previous HUB-IN discussions, deliverables, stakeholder engagement, Work Package and city meetings and monitoring workshops to date, formed in conjunction with the city teams and stakeholders.

### 2.2. REFERENCES TO OTHER PROJECT DOCUMENTS

In order to put monitoring plans in context, it is beneficial to present the challenges to be addressed in the HUA, the proposed solutions for addressing them and the outcomes that are expected as a result. Each of these topics has been deeply explored in previous HUB-IN deliverables and by other Work Packages. To avoid duplication and keep master versions of the details in a single source, that content is not replicated here. Instead, readers seeking further information may wish to refer to [www.hubin-project.eu/library](http://www.hubin-project.eu/library), for example for:

<b><u>HUB-IN Framework</u></b>	the vision, values, concepts and synchronised actions cities take towards being 'HUB-IN Places'
<b><u>Current Landscape</u></b>	the common HUB-IN narrative for the point the cities are starting from
<b><u>Entrepreneurial Ecosystem</u></b>	the key elements and dynamics of heritage-based entrepreneurial ecosystems within Historic Urban Areas
<b><u>Roadmap</u></b>	the overarching vision, values and missions of each Hub, offering numerous project options to address those
<b><u>Action Plans</u></b>	the selected interventions being implemented, with specific goals, outcomes, steps and timelines
<b>and more</b>	on HUB-IN's empowering frameworks, theory, tools, networks, training and more...

# 3. OVERALL MONITORING APPROACH

## 3.1. KEY HUB-IN ELEMENTS

The HUB-IN project intends to address the long term decline and degeneration of Historic Urban Areas by using their cultural heritage as an engine of innovation and entrepreneurship, while still preserving their unique social and cultural identity and the environment.

For the purpose of focussing the monitoring and evaluation, this can be thought of as linking together several layers to be assessed:

- **the project's Expected Impacts**

the Grant Agreement sets out "Expected Impacts" common to all its cities:

- 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, quality of life, social cohesion and integration
- Expected Impact 3:  
Boosting 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

- **Entrepreneurial Ecosystem**

WP2's "[D2.7 Entrepreneurial Ecosystems in Historic Urban Areas](#)" (van Twuijver, M., Toxopeus, H., Bosma, N. and Munch, G., 2022) sets forth the key ingredients and elements of an Entrepreneurial Ecosystem for "what makes a HUB-IN place". HUB-IN Cities aim to develop these within their Historic Urban Area in order to foster heritage-driven innovation and entrepreneurship - for example Leadership, Knowledge, Finance, etc.

- **Action Plans**

Based on their progress through the programme's phases and co-creation with their stakeholders, each HUB-IN city develops targeted interventions (Action Plans) that seek to drive change for key beneficiaries and stakeholders, across dimensions such as placemaking, data collection, co-creation and community engagement, policy and regulation, art and creativity, sustainability.

## 3.2. THEORY OF CHANGE

As can be noted from the Expected Impacts, part of the change HUB-IN intends to drive is long-term in nature (e.g. reversing trends of abandonment) and also indirect (in the sense that HUB-IN may influence and contribute towards these but can not be said to have direct control over them).

Projects that intend to drive such long-term and indirect impacts face common challenges in determining with accuracy and credibility what level of change occurred due to the project rather than, for example, due to the numerous other causes at play from existing policies, projects, investments, and technological progress to wider trends within the HUAs, cities and regions.

As set out in D5.1 “Common Impact Assessment Framework”, such projects often use a Theory of Change approach. This approach maps and tests the intended change pathways for how longer term impacts will be contributed to. By collaboratively mapping the co-created vision in a logic model, this enables the identification of which change pathways are most suitable for monitoring in the short, medium and long-term, and a discussion on where to focus limited capacity. This provides identification of the most appropriate indicators to monitor, offering balanced insights in the following categories:

1. **output indicators:** data indicating the scale of the action plans. For example, the number of organisations participating in a network-building action, to understand if the action is generating traction and who with.
2. **outcome indicators:** deeper insight via quantitative or qualitative analysis, such as pre- and post- comparisons of business growth or community perceptions via interviews, questionnaires, focus groups, surveys etc. As a simple example, the level of change in business skills / conditions that organisations experienced as a result of the Accelerator.
3. **impact indicators:** longer term tracking of broader HUA indicators, for example comparing growth in industry turnover and jobs in the Creative and Cultural Sector against the trend expected from the previous 10 years. This data is often hardest to obtain as there is often no historic (e.g. 10 years of data) HUA baseline, and when data does exist the HUA boundaries do not match normal municipal datasets. Further, change in these indicators can not be said to be directly driven by HUB-IN due to numerous other initiatives, projects, policies, investments at play. Thus, the cities do not focus most of their monitoring effort here - however a few indicators can provide useful context for the wider environment.
4. **feedback loops:** reflexive assessments on lessons and adaptations. As a simple example, a quarterly assessment by the Hub team on how well a network-building action is progressing the HUA's broader entrepreneurial ecosystem, and what adaptations can be taken to further improve.

The role that these play within a Theory of Change are illustrated in Figure 1 below.



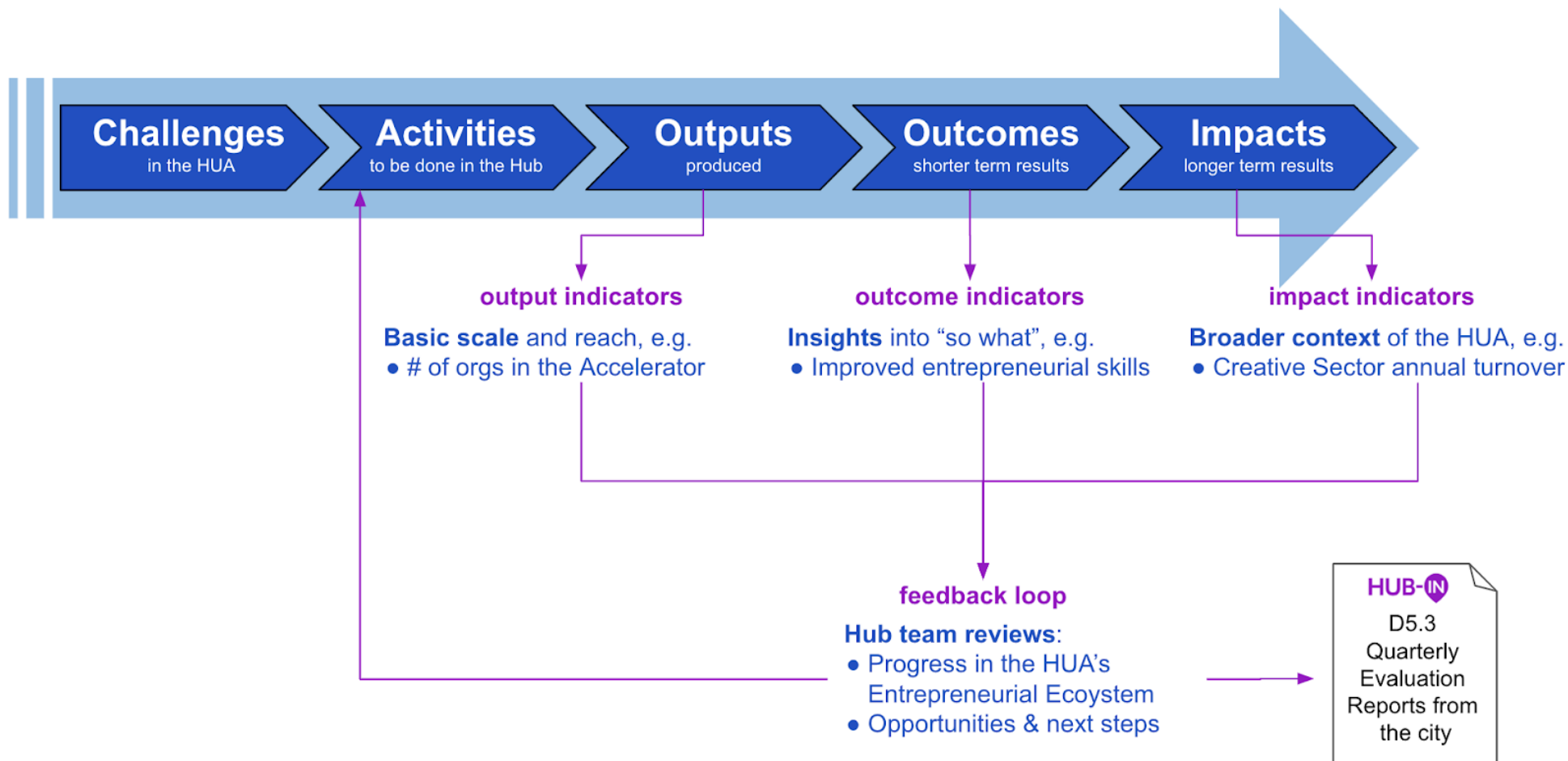


Figure 1: high level depiction of using a Theory Of Change logic model to identify where cities may most effectively blend their monitoring and evaluation effort for relevant and insightful monitoring. Details on Theory of Change and logic models are not duplicated here - for further reading see “D5.1 “Common Impact Assessment Framework”.

### 3.3. MONITORING MATERIALS

The practical application of the above is a set of monitoring materials in each city, provided in a “monitoring folder”:

1. A tailored logic model for their Action Plans
2. A data collection plan for prioritised indicators
3. Supporting materials such as draft questionnaires, surveys etc
4. A focus group guide for assessments of overall progress (feedback loops)
5. A quarterly report template

The quarterly report template will be provided to cities to support them in their monitoring. Each quarter, the core Hub teams will capture the current data for their indicators in the report and then host a session with their core team as a “feedback loop” on overall progress, opportunities, next steps and other insights. The sessions are designed for the core Hub team only in order to minimise wider stakeholder fatigue, although stakeholders can be invited as needed and depending on the topics. Findings from those findings can also be logged in the report template - thus the materials work in sequence to assist cities with a low effort way of producing the D5.3 Quarterly Evaluation Reports.

## 4. TAILORED MONITORING PLAN

### 4.1. THE EXPECTED OUTCOMES AND LOGIC MODEL

As the city has progressed from its Roadmap to its intervention details, Grand Angoulême has confirmed its expectations on a number of targeted outcomes for its Action Plans. These are mapped to Entrepreneurial Ecosystem elements in Table 1 below.

N.B. in practice, outcomes can relate to more than one ecosystem element, and only for simplicity are shown here mapped on a one-to-one basis. In addition, HUB-IN does not expect cities' current Action Plans to target all Entrepreneurial Ecosystem elements at once.

Ecosystem Element	Expected Outcomes
<b>Heritage</b>	<ul style="list-style-type: none"><li>● Improved access to data on historical heritage for project partners (CCI)</li><li>● Increased awareness &amp; protection of the green and blue heritage</li><li>● Increased awareness of culture within communities &amp; professionals</li></ul>
<b>Physical &amp; digital infrastructures</b>	<ul style="list-style-type: none"><li>● Rehabilitation of underused spaces (cafés, markets etc)</li></ul>
<b>Marketplace / demand</b>	<ul style="list-style-type: none"><li>● Increased footfall for economic actors located near the trail</li><li>● Increased visibility for creative entrepreneurs and their talent</li></ul>
<b>Support organisations</b>	<ul style="list-style-type: none"><li>● [none yet / covered by other outcomes]</li></ul>
<b>Human resources</b>	<ul style="list-style-type: none"><li>● Improved skills within businesses (fieldwork etc) &amp; access to talent</li><li>● Improved skills for students (employability) &amp; teachers(pedagogy)</li></ul>
<b>Knowledge</b>	<ul style="list-style-type: none"><li>● [none yet / covered by other outcomes]</li></ul>
<b>Finance</b>	<ul style="list-style-type: none"><li>● [none yet / covered by other outcomes]</li></ul>
<b>Leadership</b>	<ul style="list-style-type: none"><li>● [none yet / covered by other outcomes]</li></ul>

<b>Urban culture</b>	<ul style="list-style-type: none"> <li>• Reduced share of car traffic for short journeys, due to walkable paths</li> <li>• Improved exercise by local habitants due to new walking routes</li> <li>• Increased social inclusion from trail co-creation &amp; networking with orgs</li> <li>• Changed behaviours within the community to go on walks</li> </ul>
<b>Entrepreneurial culture</b>	<ul style="list-style-type: none"> <li>• Increased inclusion of cultural stories in the CCI sector's products</li> </ul>
<b>Networks</b>	<ul style="list-style-type: none"> <li>• Strengthened networks, leading to unexpected connections &amp; ventures</li> </ul>
<b>Formal institutions</b>	<ul style="list-style-type: none"> <li>• [none yet / covered by other outcomes]</li> </ul>

Table 1: the expected outcomes mapped against HUB-IN's Entrepreneurial Ecosystem elements (N.B. in practice, outcomes can map to more than one element).

These expected outcomes are mapped in a logic model, testing the link between Grand Angoulême's Action Plans, the outputs they produce, the outcomes they intend to drive for different stakeholders, and how these link to broader and longer-term economic, environmental, social and cultural visions and Expected Impacts of the project. See Figure 1 below.

To avoid duplication, details of the Action Plans are not replicated here - for further reading, please refer to the specific Action Plan documentation.

# Grand Angoulême Hub's logic model

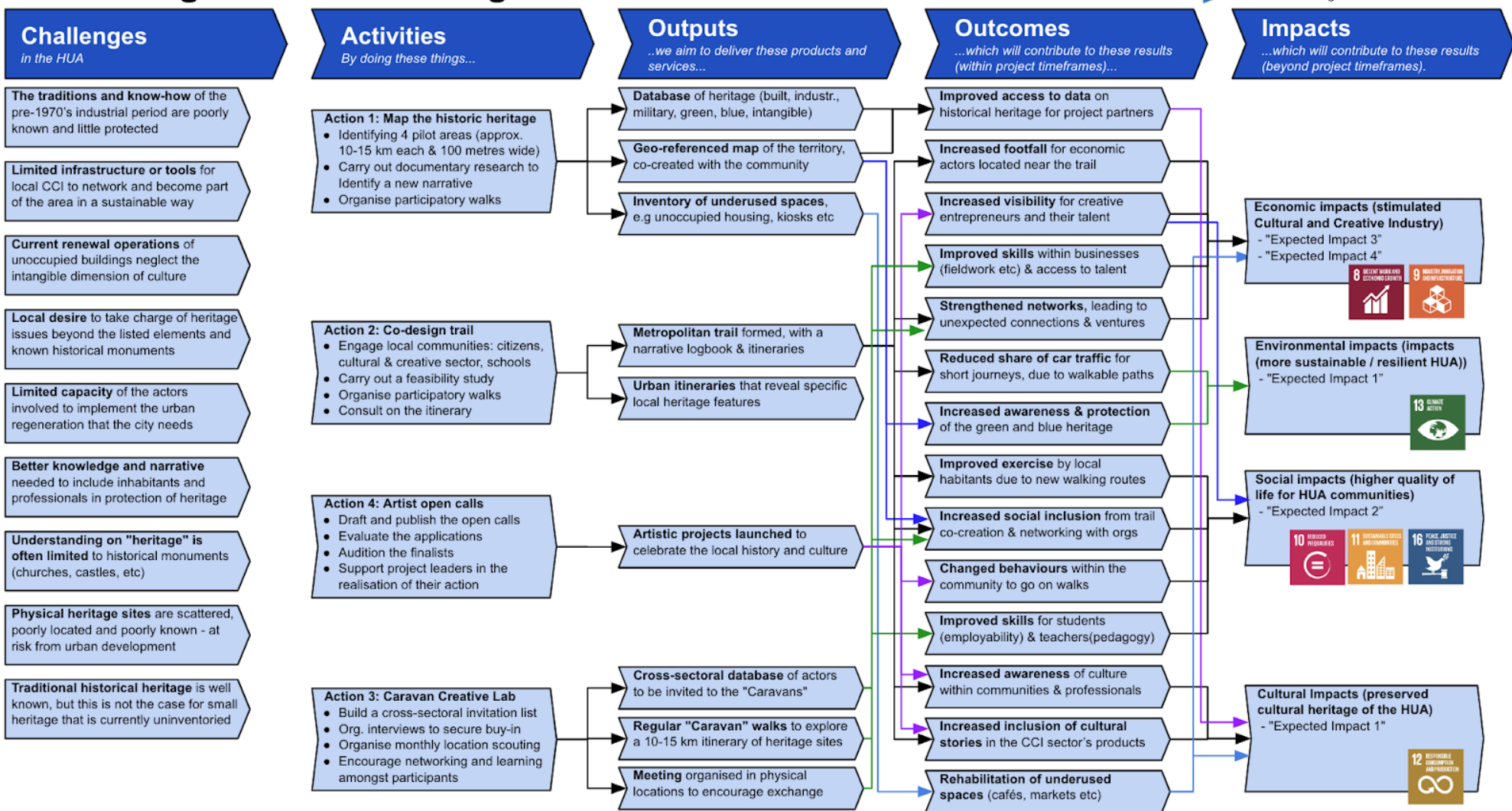


Figure 2: Grand Angoulême's logic model, illustrating the change pathways for the specific Action Plans' intended outcomes. This guides subsequent identification of monitoring indicators for priority outcomes.



## 4.2. PRIORITISED OUTCOMES

The Hub logic models contain a large suite of possible indicator options. Measuring every indicator for every outcome and impact in the logic model is not realistic or effort-effective. For this reason, Cities go through a process of shortlisting their priority indicators, with the criteria for that selection being:

1. **the outcome being monitored has a strong strategic fit with objectives**  
i.e. monitoring the outcome will provide insights on the intervention's progress towards its objectives
2. **the Action Plans directly contribute to the outcome**  
i.e. the outputs can be shown to directly drive or contribute to the outcome
3. **the outcome is expected to show a change during the project**  
i.e. there is expected to be enough "signal" to detect a change with project timescales, and thus to justify 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 experience and resourcing to analyse it.

For Grand Angoulême, the prioritised outcomes selected were:

- Increased footfall for economic actors located near the trail
- Rehabilitation of underused spaces (cafés, markets etc)
- Strengthened networks, leading to unexpected connections & ventures
- Increased inclusion of cultural stories in the CCI sector's products
- Increased awareness of culture within communities & professionals

## 4.3. METHODOLOGY

For those outcomes, the monitoring methodologies and data collection plans agreed with the Hub team are summarised below (full details can be found in the Appendix). They are grouped by Action Plan as that aligns with the delivery owners in each city.

At time of writing, city Action Plans are undergoing some refinement (e.g. still defining the challenge areas of Open Calls or Accelerators etc), as a result the programme has acknowledged that precise monitoring indicators may adapt and remain open for now. The current view is presented here.

### **ACTION 1: Map the historic heritage**

<b>Outcome indicator: increased footfall for economic actors located near the trail</b>	
<b>Trail walker study</b> <i>(from July 2024 once trail is launched. N.B. may exceed HUB-IN timelines - TBC)</i>	
<b>Purpose</b>	<p>To obtain insights into:</p> <ul style="list-style-type: none"> <li>total annual expenditure generated by the trail from visitors</li> <li>insights into demographics of the walkers (who visits, which groups are represented, which groups are underrepresented and why)</li> <li>their motivations (to inform how to increase trail visitors in the future).</li> </ul> <p>From the annual expenditure can be calculated the number of jobs supported due to the trail etc.</p>
<b>Parent population</b> <i>i.e the group to whom to generalise findings</i>	Annual visitors to the Metropolitan Trail
<b>Sample population</b> <i>i.e. the group whom data is collected from</i>	Walkers encountered on the Metropolitan Trail during the several days that data is collected. A target is 275 completed questionnaires as an appropriate example size.
<b>Study design</b>	From July 2024 (once the trail is launched): a handful of municipal staff (or interns, volunteers or students) walk the trail over several days, conducting a short 5 minute survey of walkers they encounter. The sampling days can be interspersed several days or weeks apart to account for variations in weather (and how that affects expenditure etc). The surveyors use either paper copies that are later transcribed into digital copies, or use tablets to capture data in an online survey tool / database.
<b>Indicators</b>	<p>The survey asks visitors for responses on:</p> <ul style="list-style-type: none"> <li>average daily spend on the trail</li> <li>average stay duration</li> <li>origin (from Grand Angoulême / what city)</li> <li>motivations for visit</li> <li>awareness of local heritage (Likert scores 1-5)</li> <li>perception of quality of environmental protection at specific parts of the trail (Likert scores 1-5)</li> <li>demographics (age, gender, etc)</li> <li>additionality (to what extent their visit is due to the trail)</li> <li>displacement (in absence of trail, would that spend have gone elsewhere)</li> <li>other indicators as appropriate (e.g. % of spend on CCI organisations)</li> </ul>

<b>Privacy</b>	Respondents opt-in to answering, are provided a privacy statement on how their data is used (e.g. all reporting is anonymised and aggregated), and are not required to give name or identification details.
<b>Tools</b>	The City monitoring folder contains a draft survey.
<b>Analysis</b>	The Hub team (or colleagues proficient in data analysis) can review the questionnaire results and: <ul style="list-style-type: none"> <li>• create simple visuals of the responses (e.g. distribution of daily expenditure)</li> <li>• total the expenditure (after adjusting for additionality and displacement - guidance will be provided by WP5)</li> <li>• scale up findings to the total number of annual trail visitors, if known and if appropriate from the sample data</li> </ul>
<b>Limitations</b>	Requires knowledge of the number of annual visitors to the trail (e.g. by sensors along the trail). Without this, calculations on annual direct expenditure supported by the trail may not be possible, but insights can still be given on typical spend profiles of trail walkers and their demographics, motivations, awareness of local cultural heritage etc. The trail only opens at the end of HUB-IN making it not possible to see results from this trail walker survey - as mitigation, the HUB team will do interviews with attendees at the public launch events, to understand demographics (who is over- or under-represented), motivation for coming, perception of increase in environmental protection.

The Outcome indicators above are supported by the Output indicators below:

<b>Output indicators</b> (from July 2023)	
<b>Purpose</b>	To support the outcome above with evidence of the scale, evolution and nature of the trail.
<b>Indicators</b>	<p>From Hub team:</p> <ul style="list-style-type: none"> <li>• Number of partner places along the Metropolitan Trail</li> <li>• Number of heritage sites identified (as the project develops - GIS), split by type and quality</li> <li>• Number of trail map download</li> </ul> <p>From Caravan participants and public events</p> <ul style="list-style-type: none"> <li>• Qualitative questionnaire on perception of historic heritage (number of places and stories suggested)</li> </ul>
<b>Analysis</b>	Simple tracking of the figures each quarter.

## **ACTION 2: Co-design the trail**

No Outcome is directly monitored under this Action Plan as it mainly supports Outcomes delivered by (and monitored in) the other Action Plans.

<b>Output indicators</b> (from December 2022)	
<b>Purpose</b>	To provide basic data on the status of the trail and which stakeholders are involved in its

	co-creation.
<b>Indicators</b>	<p>From Hub team:</p> <ul style="list-style-type: none"> <li>• Level of finalisation of the itinerary through 3 steps: Draft, First Version, Finalised Version for each piece of the trail</li> <li>• List of actors / partners that mainly designed each part of the trail, split by type (business, community etc)</li> </ul>
<b>Analysis</b>	<p>Simple tracking of the data each quarter.</p> <p>Simple assessment of the mix of co-designers (representation from business, community etc).</p>

### **ACTION 3: Caravan Creative Lab**

#### **Outcome indicator: Rehabilitation of underused spaces (cafés, markets etc)**

##### **Re-use of underused spaces**

*(from 2023 to 2033 - N.B. continues after HUB-IN ends)*

<b>Purpose</b>	To obtain insights into the reversal of abandonment / underuse of spaces along the trail.
<b>Indicators</b>	<p>From Hub team:</p> <ul style="list-style-type: none"> <li>• Total number of underused spaces per year, split per type of space</li> </ul>
<b>Analysis</b>	The Hub team compares year-on-year changes in the number of underused spaces.
<b>Limitations</b>	Assumption that the awareness of these spaces generated by the trail is the primary reason for their reuse - the Hub team can validate this by interviewing the re-users of the spaces.

#### **Outcome indicator: Strengthened networks, leading to unexpected connections & ventures in CCI**

##### **Caravan Participant Questionnaire**

*(from June 2023)*

<b>Purpose</b>	To obtain insights into changes in skills, awareness and network strength in the Caravan participants, and the resulting uptake of cultural heritage in CCI products.
<b>Sample population</b> <i>i.e. the group whom data is collected from</i>	Participants of the Caravan walks.
<b>Study design</b>	<p>From June 2023: participants of the Caravan walks are encouraged to complete a questionnaire after each walk. Expected 20 participants per walk, walks approximately monthly over 6 months (120 participants). As follow-up, individual interviews (30-60 min) are intended with 10-15 members of the Caravan.</p> <p>From January 2024: a post-trail questionnaire is issued to the same participants to determine changes in network strength, collaborations, awareness of heritage, skills and knowledge.</p>

<b>Indicators</b>	<p>The June 2023 questionnaire asks participants for responses on:</p> <ul style="list-style-type: none"> <li>• change in awareness of local cultural heritage (Likert scores 1-5)</li> <li>• growth of networks (Likert scores 1-5) and unexpected connections (e.g. Image sector meeting farmers), to create new products and stories in their animations / photos exhibitions / documentary</li> <li>• learnings and insights from the trail and network</li> <li>• change in skills for professionals in the Image Pole sector, e.g. fieldwork investigating and research for new stories etc (Likert scores 1-5)</li> <li>• change in awareness of environmental issues / rating of environmental quality (Likert scores 1-5)</li> <li>• increased reference to local heritage in the Image sector stories (Likert scores 1-5)</li> <li>• awareness of local heritage (Likert scores 1-5)</li> <li>• perception of quality of environmental protection at specific parts of the trail (Likert scores 1-5)</li> <li>• example of using cultural heritage from the trail in their products / art</li> <li>• demographics (age, gender, location etc)</li> <li>• additionality (to what extent their changes in skills etc are due to the trail)</li> <li>• other indicators as appropriate (e.g. % of spend on CCI organisations)</li> </ul> <p>And the July 2023 questionnaire asks participants for responses on the same questions, plus:</p> <ul style="list-style-type: none"> <li>• additionality (to what extent changes in networks, cultural awareness, skills etc is due to the Caravan)</li> <li>• displacement (in absence of trail, would that change have happened from other sources )</li> </ul>
<b>Tools</b>	The City monitoring folder contains a draft questionnaire
<b>Privacy</b>	Respondents opt-in to answering, are provided a privacy statement on how their data is used (e.g. all reporting is anonymised and aggregated), and are not required to give name or identification details. They can opt in to providing an email address for follow-up interviews.
<b>Analysis</b>	<p>The Hub team (or colleagues proficient in data analysis):</p> <ul style="list-style-type: none"> <li>• create simple visuals of the responses (e.g. distribution of the reported changes in skills)</li> <li>• extract findings on the <i>change</i> in responses (e.g. in skills or collaborations due to the trail)</li> <li>• extract findings from the qualitative responses (e.g. descriptions of which local heritage has been used in products / art, and the nature of that use)</li> <li>• follow-up interviews (30-60 min) with 10-15 members of the Caravan</li> </ul>
<b>Limitations</b>	The limited number of participants in the Caravans and the non-random method of sampling them means that results will not be extrapolated to the CCI sector as a whole - results will still give insights on Caravan participants, on likely outcomes of participating in the Caravans.

The Outcome indicators above are supported by the Output indicators below:

<b>Output indicators</b> <i>(from December 2022)</i>	
<b>Purpose</b>	To support the outcomes above with evidence of the scale of participation in the Caravans and which stakeholders are involved.
<b>Indicators</b>	<p>From Hub team:</p> <ul style="list-style-type: none"> <li>• Number of participants in the monthly scouting sessions (split by age, gender and number of attendees from public/private/community sectors)</li> <li>• Number of participants in the out-of-format one-off walking conversations (split by age,</li> </ul>



	<p>gender and number of attendees from public/private/community sectors)</p> <ul style="list-style-type: none"> <li>• Number of identified partners, split by quality</li> <li>• Number and quality of contacts made with international partners</li> </ul>
<b>Analysis</b>	Simple tracking of the numbers each quarter.

## **ACTION 4: Artist Open Calls**

<b>Outcome indicator: Increased inclusion of cultural stories in the CCI sector's products</b>	
<b>Open Call questionnaire</b> (from May 2023)	
<b>Purpose</b>	To obtain insights into the role that the Open Call played in driving business maturity, skills development and the inclusion of cultural heritage in the products / art of the supported organisations / artists.
<b>Sample population</b> <i>i.e. the group whom data is collected from</i>	Organisations / artists supported by the Open Call.
<b>Study design</b>	<p>From May 2023 (opening of the Open Call): a pre- questionnaire is issued to all supported organisations (exact number TBC after the Open Call selection).</p> <p>From Dec 2023 (after the Open Call): a post-- questionnaire is issued to all supported organisations (exact number TBC after the Open Call selection).</p>
<b>Indicators</b>	<p>The questionnaire asks the organisations on:</p> <ul style="list-style-type: none"> <li>• change in maturity of products / art (ideation to prototype to launch)</li> <li>• change in specific skills</li> <li>• extent to which the Open Call supported longer term growth - revenues and jobs</li> <li>• tangible proofs that the heritage topics are more present in their work now, and demonstrations / example</li> <li>• descriptions of the new products and services produced</li> <li>• demographics (age, gender, etc)</li> <li>• additionality (to what extent any changes are due to the Open Call support)</li> <li>• displacement (in absence of trail, would that spend have gone elsewhere)</li> </ul> <p>The City monitoring folder contains a draft questionnaire.</p>
<b>Tools</b>	The City monitoring folder contains a draft survey
<b>Privacy</b>	Respondents are provided a privacy statement on how their data is used (e.g. all reporting is anonymised and aggregated).
<b>Analysis</b>	<p>The municipal team (or colleagues proficient in data analysis):</p> <ul style="list-style-type: none"> <li>• create simple visuals of the responses (e.g. a chart of the distribution of skills development)</li> <li>• match pre- and post- responses and compare the differences in scores (e.g. the reported difference in skills, or revenues)</li> <li>• extract findings from the qualitative responses (e.g. descriptions of which local heritage</li> </ul>

	has been used in products / art, supporting quotes etc)
<b>Limitations</b>	Risk around the Hub team having limited experience in data cleaning, manipulation and analysis of pre- and post- questionnaires and Likert scores. In mitigation, they may seek support from colleagues proficient data analysis, or guidance from WP5, or they may produce a simplified version of analysis according to available capacity.

The Outcome indicators above are supported by the Output indicators below:

<b>Output indicators</b> (from December 2022)	
<b>Purpose</b>	To support the outcomes above with evidence of the scale of participation in the Open Call and which stakeholders are involved.
<b>Indicators</b>	From Hub team: <ul style="list-style-type: none"> <li>• Number of applications received, (split by organisation size and sector)</li> <li>• Number of applications successful, (split by organisation size and sector)</li> <li>• Relevance of proposals to the heritage dimension</li> </ul>
<b>Analysis</b>	Simple tracking of the numbers at Open Call stage.

Table 2: data collection methods and indicators

See the Appendix for:

- the indicators' specific data collection units, sources, frequencies of measurement, and collection start dates
- the indicators mapped to economic, environmental, social and cultural dimensions

## 4.4. “COMMON” INDICATORS

HUB-IN's Grant Agreement contained a number of indicators for the project, including some that cities are to measure as part of their monitoring and evaluation. Where possible and relevant, cities have agreed to these indicators and identified data sources. The project has also recognised that HUB-IN has evolved since the Grant Agreement (for example there is no longer an “Invention module”), and that the precise indicators and expected data sources are therefore sometimes no longer appropriate. Thus the project has agreed that cities do not need to spend effort collecting data that is no longer relevant, but will only collect data for the indicators that are still suitable and appropriate for their Hubs and actions. Where relevant, these are set out below.

Indicator	Data collection plan		
	Unit	Source	Target
<b>EXPECTED IMPACT 1: Reversing trends of abandonment and neglect of historic heritage in urban areas and landscapes</b>			
Number of Local Associations and Local Community Groups committed with HUB-IN at the local level from each HUB-IN pilot	#	Action Plan	10-15
Number of initiatives designed and developed in each HUB-IN pilot for the regeneration of places & people	#	Action Plan	3-6
Number of local stakeholders participating in each co-creation workshop to co-design the tailored roadmaps	# per workshop	WP3 ENC	25-35
Number of ideation sessions or prototyping designed and developed in each HUB-IN pilot to boost creativity and cultural heritage led regeneration in three clusters	#	NA - "invention module" no longer exists	24-42
<b>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</b>			
Number of local stakeholders participating in the development of HUB-IN pilot Action Plans	# per workshop	Action Plan	25 - 35
% of women and elderly residents engaged in the initiatives for the regeneration of places & people	% per initiative	Metropolitan Network questionnaire	30 - 40
Number of external local projects or programmes linked to the eight HUB-IN pilots for possible cross fertilization	#	Action Plan	15
<b>EXPECTED IMPACT 3: Boosting heritage and culture-relevant innovation, creativity, entrepreneurship and light 'reindustrialization' of HUAs and cultural landscapes</b>			
Number of ideas or solutions explored or prototyped during the invention process in the eight HUB-IN pilot	#	NA - "invention module" no longer exists	5 - 7
Number of ideas or solutions explored during the Accelerator programs in the eight HUB-IN pilots	#	Open Call questionnaire	9 - 10
# of start-ups offering solutions or services related with the three strategic clusters of activities	#	Accelerator Lead	7
<b>EXPECTED IMPACT 4: Cross-sector collaboration, creation of job opportunities and skills in cultural and creative sectors and innovative manufacturing linked to historic heritage</b>			
Number of products or services developed during the Accelerator programs for the eight HUB-IN pilot	#	Open Call questionnaire	1 - 2
<b>Transversal KPI 's for HUB-IN Impacts</b>			
Expected financial leverage to ensure the HUB-IN pilots' activities beyond the project lifespan (euros)	€	Hub team	€ 1,000,000

Table 3: the indicators and data collection plan for HUB-IN's Common Indicators for cities to collect

## 4.5. FEEDBACK LOOPS (QUARTERLY HUB REVIEW AND REPORT)

HUB-IN's deliverables include Quarterly Evaluation Reports from each city on progress and learnings. At quarterly intervals, the Hub team can capture the most recent data for their indicators and review them in order to draw out key insights, turning points, developments and next steps.

WP5 will provide each HUB-IN city with a standardised report template, which aims to capture key insights to date and a reflection from the Hub team on alignment with goals and next steps:

- **Activities and Outputs**  
Progress to date and identification of turning points (important moments where something changes that helps or hinders the realisation of goals).
- **Outcome and Impacts**  
Key insights gained from the monitoring of impacts and outcomes. Tactical adaptations and priorities for the short- and medium-term to reach the Hub's long-term goals.
- **Deepening the Ecosystem**  
A view of new situations in the HUA (e.g. new initiatives, projects, policies, financing options, stakeholders), and likely influence on the Hub's actions and goals.
- **Learning and Next Steps**  
Reflecting on all of the above, what are the key learnings, how will the Hub incorporate this into future project activities - specific actions and next steps to take.

These reviews can be facilitated with a member(s) of the core Hub team preparing the latest view of monitoring data, and then holding a focus group session to gather inputs on the above topics from the core Hub team. The outputs then form the content of the D5.3 Quarterly Evaluation Report, submitted to WP5 by the end of each quarter. WP5 will also hold quarterly check-in calls with the Hub team to see how the monitoring is progressing and discuss any challenges or opportunities.

The findings from these quarterly reports input to the programme's D5.4 "Final Economic, Social and Environmental Appraisal Lessons Learned" and D5.5 "HUB-IN Guidebook" for future HUB-IN cities.

## 4.6. RISK AND LIMITATIONS

As is to be expected with any project, there are some limitations to monitoring inherent in the reality of what data is available, accessible and relevant to the specifics of the interventions (Action Plans). Relevant risks and limitations are presented below, in addition to general ones in D5.1 “Common Impact Assessment Framework”.

Risk / limitation	Mitigation
Risk around the Hub team experience in data cleaning, manipulation and analysis of pre- and post-questionnaires and Likert scores.	In mitigation, they may seek support from colleagues proficient data analysis, or guidance from WP5, or they may produce a simplified version of analysis according to available capacity.
The Metropolitan Trail launches in approximately July 2024 which is at the programme's end (August 2024) - this limits the ability to draw conclusions from its use.	Monitoring thus focuses on what is measurable during programme timelines: the effect of the Canvas on network strength, skills, cultural heritage etc, the Open Call and supporting output indicators.
Effort burden on cities for collecting monitoring data across up to four Action Plans, the HUA and the Grant Agreement indicators - constraints around available capacity and experience	Intention to make effort most effective for city teams by providing support on their monitoring plans: materials, suggested indicators and data sources, workshops on where to focus effort, templates and quarterly check-in calls. As Action Plans evolve cities may prioritise which indicators to monitor, and length of questionnaires / interviews etc. Although monitoring requires effort, the benefits should not be overlooked.
Challenges in quantifying the contribution or attribution of HUB-IN's action plans, due to challenges such as lack of appropriate data options or small groups etc (e.g. <10 supported SMEs in an Open Call)	Appropriate options for analysis discussed with cities as their Action Plans evolve. If there are existing historic datasets for the HUA (e.g. 10 years of past data in order to assess changes in trends), then these are collected - however there is often a lack of datasets at the right geographical boundaries or granularity. In cases where quantitative findings are not possible or realistic (e.g. due to small sample size or a lack of credible data), qualitative alternatives are considered (e.g. focus groups, interviews and qualitative case studies etc). A balance is intended between quantitative and qualitative findings.
Willingness of Hub stakeholders to participate in recurring iterative monitoring sessions and assessments (stakeholder fatigue).	Stakeholder fatigue is recognised as a risk. Rather than require all stakeholders to attend quarterly report focus groups, the sessions are designed primarily for the core Hub team - they can review stakeholder data already provided and bring in stakeholders ad hoc as is appropriate to the topics discussed. Where appropriate, indicators in the Action Plans may involve interviews with these stakeholders, thus capturing insights at an appropriate time for the appropriate topic and minimising “standing requirements” for their repeated participation in reviews.

Table 4: risks and potential limitations of the monitoring



## 5. RESPONSIBILITIES & NEXT STEPS

Implementing the above occurs in line with the fuller details of the interventions contained with the Action Plans. Regarding monitoring, the key roles and timings are set out here.

### Key roles:

- **Paul-Hervé Lavessiere (Grand Angoulême)** - owning the monitoring for the Hub in terms of data collection, analysis, interpretation and reporting
- **local stakeholders as needed** - for insights, participatory learnings and adaptations, to be brought in as and when is suitable by the Hub team
- **Chris Taylor (WP5)** - quarterly check-ins with the Hub team on monitoring progress and their D5.3 Quarterly Evaluation Reports

### Key dates for Hub teams:

<b>Planned Issue Date</b> <i>(depends on implementation dates)</i>	<b>Monitoring item</b>
May-23	Open Call questionnaire - pre
Jun-23	Questionnaire to Caravan - pre
Jul-23	Questionnaire to Caravan - post
Jul-23	Interviews with Caravan - post
Dec-23	Open Call questionnaire - post
Jul-24	Trail Walker Study

- **by end June 2023** - Quarterly Evaluation Report completed & sent to WP5
- **by end Sep 2023** - Quarterly Evaluation Report completed & sent to WP5
- **by end Dec 2023** - Quarterly Evaluation Report completed & sent to WP5
- **by end Mar 2024** - Final Evaluation Report completed & sent to WP5. Final date for Hub teams to send data and insights for inclusion in the project's final monitoring report D5.4 "Final Economic, Social and Environmental Appraisal and Lessons Learned" and D5.5 "HUB-IN Guidebook".

# 6. APPENDIX

## 6.1. INDICATORS AND DATA COLLECTION DETAILS

The chosen indicators are grouped by Action Plan because this best aligns with the data collection owner:

Description			Data collection plan				
Indicator type	Indicator	Stakeholder groups benefitting	Unit	Data source	Frequency of measurement	Target	Data collection start date
<b>ACTION 1: Map the historic heritage</b>							
<b>OUTCOME: Increased footfall for economic actors located near the trail</b>							
Outcome indicators	Survey of trail walkers on annual direct expenditure to the trail's economic actors (once trail launched)	local heritage sites, economic actors, community, visitors	(see below)	Hub team / volunteers	samples taken on different days	300	July 2024 N.B. after HUB-IN
	– average spend	"	€	"	"	"	"
	– average stay	"	# nights	"	"	"	"
	– origin (domestic, international etc)	"	checklist	"	"	"	"
	– motivations for visit	"	checklist	"	"	"	"
	– awareness of local heritage	"	1-5 scale	"	"	"	"
	– perception of quality of environmental protection at specific parts of the trail	"	1-5 scale	"	"	"	"
Output indicators	– demographics (age, gender, etc)	"	1-5 scale	"	"	"	"
	Number of heritage sites identified (as the project develops - GIS), split by type and quality	local heritage sites, economic actors	#	Hub team	monthly	100	Dec 2022
	Number of partner places along the Metropolitan Trail	"	#	Hub team	monthly	20-30	Dec 2022
	Number of map downloads	"	#	Hub team	monthly	500-1000 per year	July 2023
	Qualitative questionnaire on perception of historic heritage (number of places and stories suggested)	"	#	questionnaire to caravan participants and public events	quarterly	50	Dec 2022
<b>ACTION 2: Co-design the trail</b>							
Output indicators	Level of finalisation of the itinerary through 3 steps: Draft, First Version, Finalised Version for each piece of the trail	local heritage sites, economic actors	qualitative	Hub team	monthly	all 8 parts of the trail finalised by end	Dec 2022
	List of actors / partners that mainly designed each part of the trail, split by type (business, community, etc)		list	Hub team	quarterly	15	Dec 2022

Description			Data collection plan				
Indicator type	Indicator	Stakeholder groups benefitting	Unit	Data source	Frequency of measurement	Target	Data collection start date
<b>ACTION 3: Caravan Creative Lab</b>							
<b>OUTCOME: Rehabilitation of underused spaces (cafés, markets etc)</b>							
Outcome indicators	Re-use of underused spaces (e.g. total number of underused spaces per year, per type of space)	local heritage sites, economic actors	#	Hub team (the future Caravan Association)	annual	20-30 by 2028-2033	Aug 2024 (after HUB-IN ends)
<b>OUTCOME: Strengthened networks, leading to unexpected connections &amp; ventures</b>							
Outcome indicators	Change in skills, awareness and network strength, via questionnaires to the Caravan members on each walk:	local creative sector	qualitative	trail-walker questionnaire	once	20 participants each in 6 walks (120)	July 2023
	– Increased awareness of local cultural heritage	"	qualitative	"	"	"	"
	– growth of networks and (unexpected) connections (e.g. Image sector meeting farmers) - to create new products and stories in their animations / photos exhibitions / documentary	"	qualitative	"	"	"	"
	– learnings and insights from the trail and network	"	qualitative	"	"	"	"
	– improved skills for professionals in the Image Pole sector, e.g. fieldwork investigating and research for new stories etc	"	1-5 scores	"	"	"	"
	– Increased awareness of the environmental issues	"	1-5 scores	"	"	"	"
	– increased reference to Grand Angoulême as a place in the Image sector stories	"	1-5 scores	"	"	"	"
<b>OUTCOME: Increased inclusion of cultural stories in the CCI sector's products</b>							
Outcome indicators	Change in skills, cultural awareness, network strength and use of culture in CCI products, via interviews with key Caravan members on each walk:	"	qualitative	30-60 min individual interviews with 10-15 members of the caravan	once	10-15	July 2023
	– Increased awareness of local cultural heritage	"	"	"	"	"	"
	– growth of networks and (unexpected) connections (e.g. Image sector meeting farmers) - to create new products and stories in their animations / photos exhibitions / documentary	"	"	"	"	"	"
	– learnings and insights from the trail and network	"	"	"	"	"	"
	– improved skills for professionals in the Image Pole sector, e.g. fieldwork investigating and	"	"	"	"	"	"
	– Increased awareness of the environmental issues	"	"	"	"	"	"
	– increased reference to Grand Angoulême as a place in the Image sector stories	"	"	"	"	"	"
Output indicators	Participation rate in the monthly scouting sessions (split by age, gender and number of attendees from public/private/community sectors)	"	# of participants	Hub team	monthly	average of 20 per walk (50% from community)	Dec 2022
	Participation rate in the out-of-format one-off walking conversations (split by age, gender and number of attendees from public/private/community sectors)	"	"	"	quarterly	100 in total	March 2023
	Number of identified partners, split by quality	"	"	"	"	"	"
	number and quality of contacts made with international partners	"	"	"	"	"	"

Description			Data collection plan				
Indicator type	Indicator	Stakeholder groups benefitting	Unit	Data source	Frequency of measurement	Target	Data collection start date
<b>ACTION 4: Artist Open Calls</b>							
<b>OUTCOME: Increased awareness of culture within communities &amp; professionals</b>							
Outcome indicators	"before" and "after" questionnaires of the supported entrepreneurs:	local creative sector	(see below)	questionnaire to the artists	annual	all supported entrepreneurs	pre- (in application form): end of May 2023
	– change in maturity of ideas (ideation to prototype to launch)	"	1-5 scale	"	"	"	"
	– change in skills	"	1-5 scale	"	"	"	"
	– extent to which the Open Call supported longer term growth in revenues and jobs (not just a one-shot)	"	1-5 scale	"	"	"	"
	– tangible proofs that the heritage topics are more present in their work now, and demonstrations / example	"	qualitative	"	"	"	"
	– case studies of the new products and services produced	"	qualitative	"	"	"	"
Output indicators	– attribution to HUB-IN	"	1-5 scale	"	"	"	"
	Number of applications received, (split by organisation size and sector)	"	#	Hub team	quarterly	no target	May 2023
	Number of applications successful, (split by organisation size and sector)	"	#	"	"	"	"
	Relevance of proposals to the heritage dimension	"	qualitative	"	"	"	"

## 6.2. INDICATORS BY ECONOMIC, ENVIRONMENTAL, SOCIAL, CULTURAL DIMENSION

In this view, the chosen indicators are categorised according to economic, environmental, social or cultural dimensions:

Description		Dimension			
Indicator type	Indicator	Stakeholder groups benefiting	Economic	Environ-mental	Social Cultural
<b>ACTION 1: Map the historic heritage</b>					
<b>OUTCOME: Increased footfall for economic actors located near the trail</b>					
Outcome indicators	Survey of trail walkers on annual direct expenditure to the trail's economic actors (once trail launched)	local heritage sites, economic actors, community, visitors			
	– average spend	"	Y		
	– average stay	"	Y		
	– origin (domestic, international etc)	"	Y		
	– motivations for visit	"	Y		
	– awareness of local heritage	"			Y
	– perception of quality of environmental protection at specific parts of the trail	"		Y	
	– demographics (age, gender, etc)	"			Y
Output indicators	Number of heritage sites identified (as the project develops - GIS), split by type and quality	local heritage sites, economic actors			
	Number of partner places along the Metropolitan Trail	"			
	Number of map downloads	"			
	Qualitative questionnaire on perception of historic heritage (number of places and stories suggested)	"			
<b>ACTION 2: Co-design the trail</b>					
Output indicators	Level of finalisation of the itinerary through 3 steps: Draft, First Version, Finalised Version for each piece of the trail	local heritage sites, economic actors			
	List of actors / partners that mainly designed each part of the trail, split by type (business, community, etc)				



Description		Dimension			
Indicator type	Indicator	Stakeholder groups benefiting	Economic	Environmental	Social Cultural
<b>ACTION 3: Caravan Creative Lab</b>					
<b>OUTCOME: Rehabilitation of underused spaces (cafés, markets etc)</b>					
Outcome indicators	Re-use of underused spaces (e.g. total number of underused spaces per year, per type of space)	local heritage sites, economic actors	Y		Y
<b>OUTCOME: Strengthened networks, leading to unexpected connections &amp; ventures</b>					
Outcome indicators	Change in skills, awareness and network strength, via questionnaires to the Caravan members on each walk:	local creative sector	Y		
	– Increased awareness of local cultural heritage				Y
	– growth of networks and (unexpected) connections (e.g. Image sector meeting farmers) - to create new products and stories in their animations / photos exhibitions / documentary	"	Y		
	– learnings and insights from the trail and network	"			
	– improved skills for professionals in the Image Pole sector, e.g. fieldwork investigating and research for new stories etc	"	Y		
	– Increased awareness of the environmental issues			Y	
	– increased reference to Grand Angoulême as a place in the Image sector stories	"			Y
<b>OUTCOME: Increased inclusion of cultural stories in the CCI sector's products</b>					
Outcome indicators	Change in skills, cultural awareness, network strength and use of culture in CCI products, via interviews with key Caravan members on each walk:	"	Y		
	– Increased awareness of local cultural heritage	"			Y
	– growth of networks and (unexpected) connections (e.g. Image sector meeting farmers) - to create new products and stories in their animations / photos exhibitions / documentary	"	Y		
	– learnings and insights from the trail and network	"			
	– improved skills for professionals in the Image Pole sector, e.g. fieldwork investigating and		Y		
	– Increased awareness of the environmental issues			Y	
	– increased reference to Grand Angoulême as a place in the Image sector stories	"			Y
Output indicators	Participation rate in the monthly scouting sessions (split by age, gender and number of attendees from public/private/community sectors)	"			
	Participation rate in the out-of-format one-off walking conversations (split by age, gender and number of attendees from public/private/community sectors)	"			
	Number of identified partners, split by quality	"			
	number and quality of contacts made with international partners	"			

Description			Dimension			
Indicator type	Indicator	Stakeholder groups benefitting	Economic	Environ-mental	Social	Cultural
ACTION 4: Artist Open Calls						
OUTCOME: Increased awareness of culture within communities & professionals						
Outcome indicators	“before” and “after” questionnaires of the supported entrepreneurs:	local creative sector				
	– change in maturity of ideas (ideation to prototype to launch)	"	Y			
	– change in skills	"	Y			
	– extent to which the Open Call supported longer term growth in revenues and jobs (not just a one-shot)	"	Y			
	– tangible proofs that the heritage topics are more present in their work now, and demonstrations / example	"				Y
	– case studies of the new products and services produced	"				Y
	– attribution to HUB-IN	"				
Output indicators	Number of applications received, (split by organisation size and sector)	"				
	Number of applications successful, (split by organisation size and sector)	"				
	Relevance of proposals to the heritage dimension	"				



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