



HUB-IN

D5.4 Final Economic, Social & Environmental Appraisal and Lessons Learned

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STATEMENT OF ORIGINALITY

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ABOUT HUB-IN

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.

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.

CONSORTIUM



Δήμος Λευκωσίας
Nicosia Municipality



Belfast
City Council



Cyprus
Energy
Agency



Agency of Braşov for the
Management of Energy and Environment



Universiteit Utrecht



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1. EXECUTIVE SUMMARY

About HUB-IN

The HUB-IN project (Hubs of Innovation and Entrepreneurship for the Transformation of Historic Urban Areas) aims to drive urban regeneration by fostering innovation and entrepreneurship in Historic Urban Areas (HUA), while preserving their unique social and cultural identity.

Eight pilot cities (Belfast, Braşov, Genova, Grand Angoulême, Lisbon, Nicosia, Slovenska Bistrica, Utrecht) have co-created and developed Hubs with local stakeholders in order to test, demonstrate and pilot these regeneration activities, with innovation as the main driver. Across the Hubs, there are 29 Actions in total - each intends a variety of short- and medium- outcomes, as well as longer-term impacts that can each be categorised by Economic, Social, Environmental and Cultural dimensions.

About HUB-IN's monitoring and evaluation

Each pilot city has previously developed a monitoring plan to measure their priority outcomes and impacts and evaluated the data in quarterly reviews as their implementations progressed, including a mix of qualitative and quantitative indicators and techniques.

This document provides an overall appraisal of economic, social, environmental and cultural impacts across the eight pilot cities' and - given many of HUB-IN's intended impacts are longer term than the duration of the programme - an evaluation of interim progress against the programme's bigger picture Theory of Change. Recommendations based on the lessons learned by the pilot cities are also included in the main text where relevant, for Follower Cities to consider as they design and develop their own Hubs, Actions and monitoring.

Methodology

The core methodology for monitoring the impacts is set out in D5.1 "Common Impact Assessment Framework" and D5.2 "Adapted Monitoring Methodologies for Each City". As a high level summary, the "anchor" for the monitoring and evaluation work is Theory of Change, an approach often used in projects where the intended impacts are too long-term or indirect to materialise at scale during project timelines. HUB-IN has its Theory of Change mapped in its programme-level logic model, and as each city developed their Actions they developed corresponding city-level logic models that map how change will be effected in their HUAs and how this will align to core elements of the programme logic model. This enabled consultations to explore options for impact assessment indicators, data collection and analysis techniques - for example differences-in-differences, control and experimental groups, matched-pairs analysis, representative surveys, carbon footprinting, and more. Some adjustments were needed to recognise the complex realities of HUAs and the effort required for primary data / modelling, as well as inherent limitations in determining long-term impacts from short-term projects, stakeholder fatigue and data gaps in HUAs, etc.

In terms of overall results, HUB-IN's longer-term impacts are not expected to materialise in its short-term project durations. There are however some positive early indications, as well as some challenges, relating to the expected impacts as well as to more foundational developments in the HUAs' entrepreneurial ecosystems. N.B. HUB-IN has 29 Actions, and only a summary subset are represented in this Executive Summary for reasons of practicality and readability.

Economic impacts

HUB-IN's more ambitious longer-term economic impacts (such creating thriving creative sectors) are not expected to materialise at scale during the project timelines. However, cities did monitor changes in underlying foundations of business growth such as skills, knowledge, innovation processes, entrepreneurial revenues, funding, staff numbers and more, and together these indicate a general direction of travel:

- **Innovation processes**

Although it is more of an output than a hard / long-term economic impact, the role of the entrepreneurs innovating heritage-based products and services is mentioned here due to its key role in HUB-IN's vision of enabling a thriving creative sector with heritage as a driver. Across the eight pilots, 78 products or services were developed in the Accelerators and Open Calls, to varying

levels of maturity from early exploratory stages to being launched and used to attract revenues. Over 100 entrepreneurs and innovators led the creation of those products and services, a mix of established entrepreneurs and individual innovators not yet operating commercially. On occasion, innovators partnered together and this was a requirement of some Accelerators to ensure that co-creation and knowledge diffusion were built in by design. The products and services frequently blended heritage with technology, from AI to data maps, to Augmented Reality, to open data maps and more. Local artistic traditions and newer artisanry were also a core part of the innovation process, including media from live performances, photograph exhibitions, interpretive dance, jewellery design and other artistic installations.

- **Networks and knowledge triangles**

The role of networking and knowledge transfer is likewise mentioned here due to its key role in fuelling entrepreneurial and economic growth. Entrepreneurs ranked networking as a strong benefit of the Accelerators: for example, the most important in Lisbon's "De-incubator" and third most in Slovenska Bistrica's Crouzet Accelerator (out of 12 benefits). It seems the exchange of new knowledge, rather than formal joint partnering, drove the valuation as "access to existing business partnerships" scored second lowest in importance to the entrepreneurs.

The sharing of knowledge between public, private, academic and community sectors was instrumental in the co-created solutions, with over organisations / associations participating across the Hubs at the granular action level at an approximate split of 28% public sector, 42% private sector, 10% academic, and 20% community. The highest rates of interest are from the private sector who played leading roles in several Actions, for example proactively shaping environmental strategies in Belfast, or acting as a jury for student design competitions in Braşov, or mentoring in the Accelerators. There were also some challenges and on occasions where the private sector gave limited signals of interest, Actions were adjusted. For example, the "HUB-IN Stamp" evolving from a mark of quality for local creatives to more of a digital hub, in line with stakeholder ambitions. Communities were also involved in user testing, design and co-creation activities, sometimes in challenging circumstances of isolation or fragmented interests, and proactive inclusion helped to address this. Academics too enabled knowledge transfer, delivery, partnerships and replication. The experience of Genoa's Academy of Fine Arts was so positive for the professors and students, as well as for the local resident's association, that their co-creation Action (public art and community story collection) will be repeated in the future. Some of HUB-IN's techniques may also be taken back into academia for dissemination. For example, in Grand Angoulême's "Artist Open Call", an artist who also teaches at university level shared that the trail format could be a welcome contrast to formal settings, providing a more simple and natural way to engage in dialogue.

- **Start-ups created**

Over 100 entrepreneurs and innovators led the creation of the products and services referenced above - a mix of established entrepreneurs and individual innovators not yet operating commercially who are expected to benefit from the mentoring, coaching, prototyping and growth in skills (more reported on in section 4 "Progress Towards the Programme's Theory of Change"). At project-level, one of the implemented *projects* has actually also decided to become a start-up, and this is one of the most important unexpected results for the Genoa Hub team. The project had aimed to create a temporary shop in the HUA for artisans and small businesses, and also to set up a Training Academy to build their capacities. This sourced a location for a pop-up market in which artisans can exhibit and sell their products and take part in a 1-to-1 advice programme with experts. 25 artisans exhibited their products and over 650 people visited the space during the 11 opening days. During the implementation, this "Fair to Share" project tested a business model to understand if the offered services were sustainable - although it is early days, due to the success of the experience they decided to create a start-up, hiring two people.

- **Revenues and funding attracted to innovators**

Some entrepreneurs attracted revenues and funding of €291,000 in gross receipts, comprised of approximately €250,000 in Belfast (£210,000) and €41,000 in Utrecht. This is prior to adjusting for various effects (leakage, substitution, displacement, deadweight, persistence, decay etc) that are a part of moving from gross receipts to an understanding of additional economic impact. These are exploratively modelled using the cities as an example. For example in Belfast, to consider if every €1 of municipal spend can result in €1.5 of benefits to the support SMEs post-Accelerator support.

Strong caveats apply, as it is still early stages as the current periods of support are in months rather than years and future forecasts depend on assumptions - so these interim findings are not intended to give certainty on exact figures, but rather to simply to explore indicatively whether local heritage *has potential* as a revenue-driving asset.

- **Investment attracted**

At Hub-Level, a total of some €837,000 funding has been attracted into the Hubs including matched funding on the Actions and funding committed at Hub level, albeit with some uncertainties remaining (€125,000 of that is based on estimates of upcoming funding rounds). The committed funding (€712,000) is comprised of Hubs leveraging their networks and evidence to unlock matched funding from public, private and voluntary organisations (Belfast), and commitments to annual contributions from local entrepreneurs funds and owners' collectives over the next 3 years (Utrecht).

HUB-IN has also contributed to other complementary projects securing €84,000 funding by providing tangible evidence and alignment (N.B. this funding does not go to the Hubs and can not be 100% attributed to HUB-IN, it refers simply to aligned projects in the HUA who recognised that their funding success was partially contributed to by the local Actions). These include HUA greenification projects, bridge feasibility studies and multidisciplinary events focussed on transforming public spaces into hubs of art and creativity, involving local artists, the community and companies (Belfast and Braşov).

Attracting enough funding or investment to maintain operations as a Hub in the future has proved challenging for most Hubs - commercial sustainability remains an open question.

Social impacts

HUB-IN's longer-term social impacts (such as improving overall quality of life for residents) are not expected to materialise at scale in its short-term project durations. However, cities did monitor and understand changes in cultural awareness from public events, changes in behavioural intentions regarding the HUA, feelings of belonging, and sense of identity. These are often conducted on a neighbourhood or per-event basis so are not taken to provide definitive, statistically significant inferences for the city's wider population. However, they do aim to provide Hubs with insights on what works well and what doesn't work well, for which stakeholder groups, to inform adaptations and future replications of their Actions.

- **Inclusion**

In terms of co-creation, over 150 local associations and Community Groups were committed with HUB-IN at the local level across the pilots. Wider stakeholder groups also engaged at Action level, in a broad split of 28% public sector, 42% private sector, 10% academic, and 20% community. One academic partner is seeking to replicate their role in the Actions based on their experience (Academy of Fine Art, Genoa, Public Art and Community Stories initiative).

At Action stage, public demonstrations typically attracted balanced demographics, varying by HUA. One of the unexpected negative results is some lack of participation from isolated communities. For example, in Mouraria (Lisbon), there are more than 70 different nationalities of residents with very different cultural patterns. This indicates the complexities that HUAs operate under, and that collaboration with local associations already in contact with these communities is essential to mitigate problems of community involvement and participation.

- **Accessibility**

Accessibility (in terms of the HUA being walkable for people with all type of physical ability) was an issue in some HUAs, and some of the projects saw results in improving this - on one Heritage Walk example (Nicosia), 68% of post-walk respondents reported the walks had increased accessibility and inclusion "a lot" or "extremely" (on a 5 point scale from "not at all" to "extremely", across 99 respondents to over 1,000 walkers surveyed). This statement was also supported by the demographics, which show a diversity in gender, age and residency among the participants. A special walk was also organised towards the end of this activity, addressed to deaf people / people with hearing impairments. Tour guides and walkers recognise more is needed though on adapting the physical infrastructure, which remains a significant barrier.

Three innovators in Lisbon proposed granular innovations directly related to inclusion and accessibility: mapping accessible routes for people with disabilities to take though a winding and heavily staircased HUA; exploring services for HUA homes to welcome travellers who are accompanying a family member undergoing temporary hospital treatment; and experimenting with a service for blind, special needs and mobility-impaired people to visit and experience tourist destinations and cultural heritage to the full. It is too early for them to have measurable social impacts, as they are early stage prototypes.

- **Cultural awareness and sense of place**

These were some indications of stimulating public connections to local heritage, for example, event participants giving feedback on Pop Ups contributing to an awareness of local history and inspiring a desire to reconnect with ceramics, or walkers on Heritage Walks reporting increased sense of pride. Other actions directly target the physical place, such as reclaiming 938m² of public realm from illegal occupation by commercial operators (Braşov), and a future-looking Waterfront Promenade Framework (Belfast) etc.

- **Well-being**

Some (ongoing) co-creations aimed to support physical and psychological safety, for example through lighting plans that aim to stimulate future HUA visits by creating a sense of safety, identified through co-creation activities as being of high importance to residents.

And some nascent evidence of well-being being driven by (serendipitous) connections and social interactions. For example, urban furniture designed where a small sample of users agree on the furniture's ability to invite relaxation and create non-tourist resting spaces within the public squares, and to encourage interactions with other people or passersby (Braşov).

- **Behavioural change**

A proportion of respondents in Actions indicated intentions for new behaviours too: about a third of the Lisbon Pop Up respondents indicated they would visit the HUA more frequently (38%, sample of 42), and again about a third join local art or culture clubs in the HUA (36%). Heritage Walkers in Nicosia experienced one or more of ten walks, and about half gave feedback that they would participate in more local events as a result (54%, sample of 99), and likewise for showing more interest in the HUA (50%).

Environmental impacts

HUB-IN's longer-term environmental impacts (such as stimulating circular economies) are not expected to materialise at scale in its short-term project durations, and the Actions' objectives, methods or timescales did not always suit traditional assessment formats such as carbon footprinting, or material flow studies etc. However, cities did aim at some environmental considerations in their Actions that indicate a general direction of travel.

- **Environmental skills in entrepreneurship**

Several SMEs in Accelerators reported increased skills in "entrepreneurship and innovation that is environmentally sustainable" in pre-and post- self-assessment surveys, even if not the focus of their products. Some innovators did also directly target sustainability, such as recycled aluminium jewellery workshops (Slovenska Bistrica), based on traditional metalworking techniques and with materials coming from a local aluminium factory (2kg/year). The supported innovators are mostly in the very early stages of their entrepreneurial journey, too early to have attracted revenues.

- **Environmental interest captured from communities**

Community participants reported the value of environmental interventions in HUAs, although this is not the same as them having developed related entrepreneurial skills themselves, or the actions generating sustainable results. Example interventions included readapting a 70-year-old municipal wash house, with community proposals frequently referencing local environmental challenges such as heat island effect, water consumption, biodiversity loss and food production (Lisbon). About 9 out of every 10 participants reported an increased awareness of sustainable solutions for heritage in

urban areas due to the project (89% out of 19 respondents from the action participants). Other Hubs also addressed environmental actions, such as increasing local creative Hubs' capacity to make greenification projects (Utrecht), and assembling community "wishlists" for community green spaces etc (Slovenska Bistrica).

- **Environmental considerations in strategies and policies**

Several Actions leveraged the environmental concerns of the co-creators. For example, a Waterfront Promenade Framework recognised the HUA is itself a blue asset, and its future development needs done in close connection with its ecological value and services (Belfast). A lighting masterplan was formed in conjunction with consultation of residents, the overwhelming majority believed that the public lighting in the HUA must be as "green" as possible. Thus, solar panels and LEDs are seen as of paramount importance and the resulting strategy's conceptual designs and technical specifications emphasise minimising light pollution and adhering to sustainability principles (Braşov).

- **Direct environmental impacts from building refurbishment**

One Hub saved an estimated 384kg of carbon (CO₂e) by exercising control over their Hub's refurbishments, by specifying environmental credentials / approaches in the contracts for redeveloping the space (Slovenska Bistrica) and ensuring use of recycled materials

Other interim progress towards the programme's longer term Theory of Change

Given that HUB-IN does not expect its longer-term impacts to be detectable at this stage, the programme also performed an evaluation of the interim findings to understand progress against the Grant Agreement's Theory of Change, based on the evidence of each Hub's findings and consortium working sessions. The consortium scoring recognised pockets of moderate results, whilst recognising challenges in each and that the longer-term impacts are a more complex journey. The scores are by nature subjective, as the value lies in the scoring discussions triggering reflections and learnings, and these can also be taken as summarising the content directly above.

- *Outcomes scored as potentially showing moderate results* include the increased rehabilitation of underused land, inclusiveness of key stakeholder groups, understanding of how to achieve Hubs of Innovation and Entrepreneurship, connections between entrepreneurs and innovators, improved innovation processes and skills.
- *Outcomes scored as potentially showing partial results* include the recovery of cultural heritage values (beyond inclusion in outputs), identity-building in HUAs, increasing the attractiveness of HUAs as a location for business operations, increasing pride of place and heritage-related behaviour change, inclusion of environmental sustainability principles into HUA redevelopment, creation of sustainable new jobs created and reducing gaps in traditional public investments.
- *Outcomes scored as showing no results yet* include increasing the well-being of local citizens (physical and mental health were not direct primary objectives of Actions, although some nascent innovations explore potential in this area), and increased numbers of sustainable HUAs that are creative and using heritage-led regeneration (requires time for post-programme Follower Cities to join, implement Actions, observe impact results, etc).

Future value and sustainability: can Hubs generate a "flywheel effect"

The consortium consensus is that HUB-IN's intended impacts require longer-term horizons and resources to materialise, with the exception of those early indicative results in the Economic, Environmental and Social Impact sections above. There is However, discussion also explored the potential for the Hubs to generate a "flywheel effect", whereby small successes in one area help to generate small successes in another area, which combine to generate successes in another area and so on, perhaps in a non-linear way, eventually attracting resources into the HUA to enable the Hub's continuation. Both Belfast and Utrecht Hubs identified knock-on results similar to a "flywheel effect", and which generated the "Investment attracted" outlined above - although too early to tell, this indicates one way developments in the Entrepreneurial Ecosystem elements of each HUA could build on each other in a virtuous loop, ideally to fill the commercial sustainability gap.

2. ABOUT THIS DOCUMENT

2.1. PURPOSE

This document provides a final appraisal of economic, social, environmental and cultural impacts across the eight pilot cities' Actions and - given many of HUB-IN's intended impacts are longer term than the duration of the programme - an evaluation of interim progress against the programme's Theory of Change (logic model). Recommendations based on the lessons learned by the pilot cities are included where relevant.

Across the eight cities, there are 29 Actions. Some have commonalities that enable common indicators (for example all Accelerators assessed revenue growth in the supported entrepreneurs) and some have core distinctions that required a bespoke set of indicators. Each city was responsible for its own data collection, analysis and reporting, with support from the D5.2 "Adapted Monitoring Methodology", and other light support from Work Package 5 Monitoring and Evaluation. Those findings can be referenced in the cities' D5.3 Evaluation Reports, which contain their detailed findings arising from their quarterly reviews.¹

For readability, this document does not duplicate full granular analysis and commentary of 29 individual Actions - instead it takes a cross-programme view, looking across those city findings to assess overall impacts and progress towards the Theory of Change. Summary references are made to city examples that form an evidence base for those evaluations, and readers can refer to the D5.3 Evaluation Reports for fuller details on each city.

2.2. AUDIENCE

This appraisal is written with three main audience types in mind:

Consortium
(*pilot cities, Work Packages*)

The report is based on core content from the pilot city teams in their quarterly monitoring reports, monitoring sessions, consortium meetings and other interactions. Likewise for the Work Packages inputting to the above for previous monitoring documents and evaluating current findings.

Follower City teams

The report may indicate the types of impacts, progress and wider Theory of Change from the programme, as well as give examples of monitoring approaches undertaken by the Pilot Cities. Challenges and nuances are also shared, to help inform Follower Cities on current unknowns or outcomes that are too early to evaluate definitively.

Impact assessors

The report (in conjunction with D5.1 "Common Impact Assessment Framework", D5.2 "Adapted Monitoring Methodologies for Each City", and D5.3 "Quarterly Reports") aims to be transparent on methodologies and techniques used, and also successes, limitations, challenges and learnings, under the ethos of knowledge sharing on positives and negatives on innovation programmes.

¹ <https://hubin-project.eu/library>

Given the breadth of the programme, readers may wish to navigate to the appropriate section for their primary interests:

Section 1: Executive Summary

This section shares the main Hub findings at a high level, focussing mainly on evidence of economic, environmental and social impacts to-date. Main findings are also shared for wider progress towards the programme's longer term Theory of Change (for example short- or medium-term outcomes found by the consortium to have strong, moderate or partial results), and considerations on the sustainability of Hubs.

Section 2: About This Document

This section briefly recaps on the methodology and inputs leading to this document. Readers familiar with HUB-IN can skim as a brief refresher, or readers new to HUB-IN may wish to use the content and links as a springboard to other HUB-IN documentation produced by other HUB-IN Work Packages, partner cities and Work Package 5 "Monitoring and Evaluation". The documents are referenced to avoid duplicating content here.

Section 3: Economic, Environmental and Social Impacts

This section shares deeper findings on impacts across the Economic, Environmental and Social dimensions. Cultural impacts are also included within that, considering the interlinking nature of these dimensions. Summary examples across all eight pilot cities are provided to illustrate the evidence behind each finding, and the dimensions end with a deeper excerpt from one of the pilot cities' evaluations for one of their Actions. The role of additionality and considerations on Hubs generating a virtuous "flywheel effect" are also considered.

Section 4: Progress Towards the Programme's Theory of Change

This section provides a much deeper dive into each outcome and impact in the programme logic model, assessing key points for each and underpinning those with examples from the pilot cities. This section contains a deeper level of detail on the quantitative and qualitative results from the Actions, but taking a cross-city view to identify common findings. The outcomes and impacts were scored by the consortium in terms of the maturity of evidence - strong / partial / moderate / none yet - to recognise that whilst it is too early for some of the longer-term impacts to have materialised, there may be evidence of a direction of travel towards them. Recommendations from the pilot cities are also included.

Section 5: Appendix

This section contains "spotlight" deep dives on an Action from each pilot city. They include a variety of Action types and assessment findings, both quantitative and qualitative. The spotlight examples typically progress through a sequence of capturing the operational outputs of the Action, a process evaluation on what went well and what could be adapted, an impact evaluation on their monitored outcomes, and any key next steps. These are taken from the pilot cities' D5.3 Evaluation Reports. Additional appendices are included per the Table of Contents on how the evaluation findings link with policy and innovation scoreboards.

2.3. INPUTS

The overall assessment presented in this document builds on specific inputs from Work Packages and city teams related to monitoring and evaluation, including:

- the common impact assessment framework (D5.1)
- logic modelling workshops during the Action Plan phase
- adapted monitoring methodology for each city (D5.2)
- quarterly reports from city teams on the results of their monitoring (D5.3)
- consultations and reviews with city teams and Work Packages
- consortium meeting group sessions
- other HUB-IN deliverables and activities (see directly below)

The assessment occasionally refers to earlier HUB-IN stages and frameworks, including the challenge areas identified in the HUAs, the proposed solutions for addressing them, etc. Each of these topics has been deeply explored in previous HUB-IN deliverables 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 refer to www.hubin-project.eu/library, for example for:

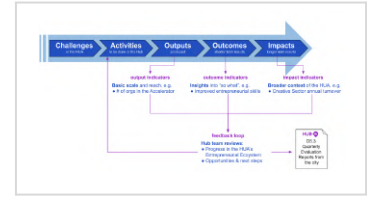
D3.3 HUB-IN Framework and Long Read Papers	the conceptual values, criteria and phases that cities can take towards being 'HUB-IN Places' (WP3)
D3.1 Current Landscapes of the Eight HUAs	the city-level narratives on local moods, hopes, fears and community needs that are the point the cities are starting from (WP3)
D2.7 Entrepreneurial Ecosystems in Historic Urban Areas	the key elements and dynamics of heritage-based entrepreneurial ecosystems within Historic Urban Areas (WP2)
D3.5 Eight Tailored Project Roadmaps	the overarching vision, values and missions of each Hub, offering numerous Action outlines to address those (WP3)
D4.2 Eight HUB-IN Action Plans	operational details on the specific Actions being implemented: their context, goals, objectives, steps and timelines (WP4)
D4.5 Final HUB-IN Story Telling	retrospective city narratives highlighting the activities that took place in their Historic Urban Areas from the Actions (WP4)
D5.5 HUB-IN Guidebook for Cities	a report guiding how to apply the HUB-IN pilots and services in other cities' Historic Urban Areas
D6.3 Historic Urban Areas Leadership Guide	a guide on key conclusions and policy recommendations for Mayors, politicians, CEOs, creatives, community leads, institutions and more
and other resources	such as HUB-IN's empowering frameworks, theory, tools, networks, training and more (WP1,2,3,4,6,7)

2.4. METHODOLOGY

Core methodology is set out in D5.1 “Common Impact Assessment Framework” and D5.2 “Adapted Monitoring Methodologies for Each City” and is not duplicated here. As a high level summary:

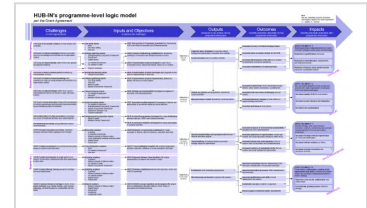
1. *Theory of Change*

The “anchor” for the monitoring and evaluation work is Theory of Change, an approach often used in projects where the intended outcomes and impacts are too long-term or indirect to be detected at scale during project timelines (for example being subject to numerous other causal factors or requiring time to embed and develop).



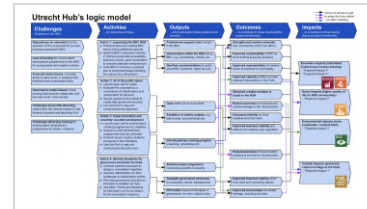
2. *programme-level Theory of Change*

The Grant Agreement provides inputs for an overarching logic model to assess the often very different distinct projects across the eight Hubs and 29 Actions. It contains reference to HUB-IN’s “four Expected Impacts” which lent themselves well to categorisation by Economic, Environmental, Social and Cultural dimensions.



3. *city-level Theory of Change*

As each city refined how their Actions would drive change in the short-, medium- and long-term, a logic model was developed for how their Actions can align to core elements of the programme logic model. Logic models are constructed to test the objectives and assumptions, and inform materials that can monitor outcomes or build evidence on the “direction of travel” towards them. Priority outcomes were agreed.



4. *city-level monitoring materials*

Consultations next explored options for impact assessment techniques such as differences-in-differences, control and experimental groups, matched-pairs analysis, representative surveys, carbon footprinting, and so on. These often needed adjusted to constraints on the expected scale of impact and the reality of complexities in HUAs (see section 2.5 on Limitations). Monitoring materials were also drafted.

6. APPENDIX
6.1. Indicators and Data Collection Details

Indicator	Measurement	Frequency	Responsible Party	Data Source	Notes
Number of people participating in activities	Count	Quarterly	Hub	Activity reports	...
Number of people completing training	Count	Quarterly	Hub	Training records	...
Number of people receiving support	Count	Quarterly	Hub	Support logs	...
Number of people achieving goals	Count	Quarterly	Hub	Goal tracking	...

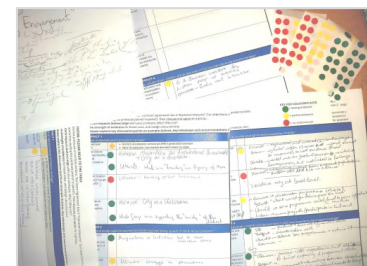
5. *city-level reporting*

As Actions implemented, cities collected and assessed their pre- (baseline), during and post- data. As impacts were not always expected to be detectable during project timelines, this included operational results and process evaluations as well as impact evaluations. Part of the reports aimed to encourage “reflexive monitoring” processes, whereby Hub discussion could uncover learnings and adaptive actions. *These findings input to the impact evaluations in section “Economic, Environmental and Social Impacts”.*



6. *consortium evaluation sessions*

Consortium Meetings featured sessions where cities and Work Packages could hold interactive discussions and reflections on the findings to date. In the most recent, city and Work Package teams reviewed the assembled city-level findings and participated in a cross-city scoring exercise on the maturity of results against the programme-level logic model, forming a loop with step 1 above. *These findings input to the “direction of travel” evaluations in section “Progress Towards the Programme’s Theory of Change”.*



2.5. LIMITATIONS

A few standard notes were important in interpreting data from the HUB-IN city Actions and monitoring:

- *determining long-term impacts from short-term projects*
Some of the regeneration actions in HUB-IN cities are expected to contribute to results in the medium- or long-term (i.e. beyond the end of the programme). The monitoring in all HUB-IN cities that is used in this report necessarily finishes before this point, at a “snapshot” in their evolution. *Therefore, indicative findings and evidence are presented at this stage, rather than a “final answer”.*
- *finite resources*
As with all programmes, there is a finite constraint around budget and effort available to monitor. Some datasets, such as monitoring granular changes in (re)use of underused commercial spaces, are not readily available without significant primary data collection. Attempting to monitor all possible outcomes, with all possible data, and applying all possible assessment techniques, is not an appropriate or cost-effective approach in impact assessments. *Instead, a handful of priority outcomes are assessed, as identified with city teams and stakeholders.*
- *principles of feasibility, relevance, and practicality are important for decentralised monitoring teams*
City Hub teams are responsible for their monitoring and analysis but do not always have access to economists, social scientists, environmental scientists, statisticians or professional qualitative researchers etc. Some do have strong backgrounds in quantitative and qualitative fields, or access to university students. This mix is expected to be similar to Follower Cities, who may have varying degrees of experience and comfort in data collection and evaluation. *The expectation of the city reports is not for overly academic, lab-level research and statistics - but for practical, easily replicable approaches that make use of available data for usable insights for the Hub.*
- *municipal approvals processes*
Several Hub teams raised that their monitoring materials needed to be signed off within the council before they could be launched - for example to ensure survey questions align with recent, current or planned surveys etc. On occasion this can be a lengthy process, and there is a risk that the content of monitoring materials are changed locally during this process as part of the approvals process. In some cases, questions may be edited or descoped, and this can influence the findings possible. As an example, two attitudinal questions in a community survey may get merged into one single question that still asks about two attitudes, and this weakens the relevance of the responses. In other cases, demographics data (income levels, community of residence) is not considered appropriate to ask, as it inflames historic trust issues or risks the public disengaging with the monitoring, or even disengaging with the Action. In other examples, footfall sensors were not granted permission to be installed in the heritage area, and the assessments needed to adapt. *As above, the aim is for approaches that are practical in the context of the local HUA and Hub needs.*
- *data constraints (sample sizes, commercially sensitive data, community trust, stakeholder fatigue etc)*
Whilst there is some leverage over contracted parties to provide data (e.g. all Accelerators were advised to make completion of pre- and post- surveys a contractual condition of the innovators receiving payment), sample sizes are highly dependent on the scale of the action and often the goodwill of public respondents. Much data is self-reported without scope for auditing (e.g. third party revenues). Stakeholder or community surveys etc will not necessarily meet the sample sizes or probability-based requirements used in academic papers for statistically significant findings or hypothesis testing etc. Robust techniques for this level of quality were considered (e.g. large scale professional community surveys, difference-in-difference techniques, etc) but - as per the points above on finite resources and the small / short-term nature of many Actions - these did not pass the programme's or cities' requirements for proportionality, relevance and cost-effectiveness. *Thus, the evaluation findings should not be taken as fully representing the larger population in the city, but as indicative for the samples consulted. The findings investigate evidence for the outcomes specific to those Actions, and inform Hub adaptations and areas of potential future monitoring.*

3. ECONOMIC, ENVIRONMENTAL AND SOCIAL IMPACTS

HUB-IN's longer-term impacts are not expected to materialise in its short-term project durations.

Typical economic, environmental or social impact assessments for typical regeneration programmes might monitor standard indicators such as total jobs created (or supported), Gross Value Added, unemployment rates, income inequalities, business birth and death rates, export markets, housing affordability, physical health, mental well-being, crime rates, job quality, civic participation in demographic voting, literacy levels, youth unemployment, carbon emissions, air quality, waste-to-landfill, etc. HUB-IN is not a duplication of standard regeneration approaches and whilst it aims to contribute to these impacts it does not target these in a limited way - at least during programme timelines. Rather, its intervention period aims to mobilise in a more holistic way the earlier *foundations* that may organically contribute to such specific benefits in the medium- to long-term, by way of growing networks, know-how, heritage prototypes, data discovery, an entrepreneurial culture of co-creation, and so on. More details on the "entrepreneurial ecosystem" elements that are the key "ingredients of a HUB-IN place" can be found in the project's Framework.²

As such, the programme has not expected to see hard economic impacts (numbers of jobs created etc) by the time of this evaluation - it has aimed to build a direction of travel towards those in the medium- / long-term. There are some positive early indications, as well as some challenges, and those relating to standard economic impact assessment are described in this section, whereas those relating to interim growth in those foundations are described in Section 4 "Progress Towards the Programme's Theory of Change". That section presents evaluations of the evidence from consortium working sessions and other inputs, to determine progress against the programme's Theory of Change. N.B. to avoid duplication and for reasons of practicality, not all 29 pilot city Actions can be referenced fully here and therefore a summarised subset of references is made - see the cities' D5.3 Evaluation Reports for fuller details on their evaluations.³

3.1. ECONOMIC IMPACTS

Innovation processes

Although it is more of an output than a hard / long-term economic impact, the role of the entrepreneurs innovating heritage-based products and services is mentioned here due to its key role in HUB-IN's vision of enabling a thriving creative sector with heritage as a driver. The knowledge gained and demonstrated may facilitate longer-term impacts in revenues and job growth.

Across the eight pilots, 78 products or services were developed in the Accelerators and Open Calls.

These developed from and to varying levels of maturity, for example some are early stage explorations not yet ready for commercial launch, whereas others are actively seeking funding opportunities and attracting revenues. An additional 41 ideas were explored at a higher level, giving a total of 119 ideas or solutions explored during the Accelerators / Open Calls,

Over 100 entrepreneurs and innovators led the creation of those products and services. In some Accelerators, the participants were already established as entrepreneurs whereas, in others, individual innovators were targeted precisely because they needed assistance launching an entrepreneurial venture. On occasion, the innovators partnered together, and this was a requirement of some Accelerators to ensure that co-creation and knowledge diffusion were built in by design.

The products / services blended heritage with technology, from AI to data maps: including Augmented Reality, Mixed Reality, AI, game engine technology, digital sculptures, photogrammetry, sound recordings, volumetric film, 3D holographic experiences, NeRF scanning (extracting 3D information from 2D images), pretext object design kits, digital platforms, open data maps and more.

² <https://hubin-project.eu/library/hub-in-framework-overview/>

³ <https://hubin-project.eu/library>

Local artistic traditions and newer artisanry were also a core part of the innovation process:

including media such as live performers, fiction, comics, photograph exhibitions, interpretive dance, social mosaics, public walks, jewellery design, tea-light holders, canvas illustrations, prefabricated urban pavilions, and other artistic installations. Details can be found in Appendix 5.1 Spotlights: Specific City Assessments, as well as in each city's D5.3 Evaluation Reports. Revenues attracted and start-up creation are also referenced directly below.

Networks and knowledge triangles

The role of networking and knowledge transfer is likewise mentioned here due to its key role in economic growth. Both elements are core parts of the entrepreneurial ecosystem aspirations within the Hubs. This is important corresponding to 'knowledge triangles', which involve linking stakeholders and activities in education, innovation and business creation - the generation, diffusion and application of knowledge helps to fuel growth in knowledge-based economies.

Entrepreneurs generally ranked networking as a strong benefit of the Accelerators. For example, in Lisbon's "De-incubator" post-support surveys revealed that the most important benefit entrepreneurs received was "networking that led to knowledge exchange". Similarly in Slovenska Bistrica's Crouzet Accelerator, "opportunities for networking and knowledge sharing" ranked as the third most important benefit for the four entrepreneurs (out of 12 benefits). It seems the exchange of new knowledge, rather than formal joint partnering, drove that valuation as "access to existing business partnerships" scored second lowest in importance to the entrepreneurs.

The interaction of public, private, academic and community sectors directly co-created solutions, with organisations / associations participating across the Hubs at the granular action level at an approximate split of 28% public sector, 42% private sector, 10% academic, and 20% community. Of course, different organisations / associations with themselves have different numbers of members (attendance was not tracked at individual level), and different barriers and opportunities were faced within each sector. These are described in more detail in Section 4 "Progress Towards the Programme's Theory of Change".

- **The highest rates of interest are from the private sector,** as approx. 42% of stakeholders in Hub actions and in varying roles of designing, developing, delivering and innovating. This interest is promising because commercial viability is a crucial component of heritage-based entrepreneurship if it is to escape the requirements on public funding and subsidies. On occasions where the private sector gave limited signals of interest, Actions were adjusted. For example, Lisbon's "HUB-IN Stamp" evolved from a mark of quality for local creatives, to more of a digital hub that can facilitate connections, disseminations and access to the georeferenced database (GeoTool), perceived by the stakeholders as important aspects.
- **Public sector was occasionally overrepresented at early stages, but showed it can balance out over time.** For example in Grand Angoulême's first Caravanes (creative walking labs), the early sessions were dominated by public sector attendance. However, over 13 sessions there was a "snowball effect" whereby artist contacts generated more artist contacts... whereas the first session included artists as one in ten of the total invitees, by the 13th session that representation had grown to about 2 out of every 3 (64%).
- **Proactive inclusion helped to overcome some fragmented community interests.** For example Braşov's Action 3 "Immersive Night-time Experience" revealed potential conflicts of interest between community aesthetics and commercial pressures for retailers: data from 91 qualitative study surveys emphasised that illuminated advertisements and commercial lighting of shops in the HUA pollute light and create, sometimes, the feeling of the old station bazaar. Guidelines were established for street, commercial, and architectural lighting to ensure harmony with the historic environment, and the strategy was unanimously adopted by the Local Council.

- **Academics enabled knowledge transfer, delivery, partnerships and replication.** For example, Genoa's "La Via delle Storie" was co-created and implemented by the local Academy of Fine Arts professors and students, an important collaboration between the Municipality and the Academy. The two institutions signed a framework agreement that could be the starting point for further future cooperation. The experience was so positive for the Academy' professors and students, as well as for the local resident's association (Comitato per Prè), that it will be repeated in the future.
- **Some of HUB-IN's techniques may be taken back into academia for dissemination.** For example, in Grand Angoulême's "Artist Open Call", an artist who also teaches at university level shared that the trail format could be a welcome contrast to formal settings, providing a more simple and natural way to engage in dialogue.

Start-ups created

Over 100 entrepreneurs and innovators led the creation of the products and services referenced above - a mix of established entrepreneurs and individual innovators not yet operating commercially who are expected to benefit from the mentoring, coaching, prototyping and growth in skills (more reported on in section 4 "Progress Towards the Programme's Theory of Change"). If Hubs continue to run the Accelerator monitoring annually, they may also be able to detect the commercial trajectory of those innovators over time, by comparing revenues and staff (amongst other factors and adjustments) to the baseline. At project-level, one of the implemented *projects* ("Fair to Share", Genoa) has actually also decided to become a start-up, and this is one of the most important unexpected results for the Hub team. The project had aimed to create a temporary shop in the HUA for artisans and small businesses, and also to set up a Training Academy to build their capacities. This provided a total of 12 classes on topics from business modelling to legislation, media content creation, video editing for social media and e-commerce, and in total ten subjects were involved in the training. It also searched for and found the place to host the temporary shop, which consisted in a pop-up market in which artisans can exhibit and sell their product and take part in a 1-to-1 advice programme with experts.

The pop-up market was open on Fridays, Saturdays and Sundays in May 2024 - 25 artisans exhibited their products at "Fair to Share" and over 650 people visited the space during the 11 opening days. The implementers reported a positive feedback from the creators' community and local residents: essentially that the active involvement of associations, traders, craftsmen and professionals helped to create a tangible sense of community by promoting collaboration and innovation in the historic centre. During the implementation, "Fair to Share" tested a business model to understand if the offered services were sustainable - due to the success of the experience they decided to create a start-up, hiring two people.

Revenues and funding attracted to innovators

Some entrepreneurs attracted revenues and (non-HUB-IN) funding of €291,000 in gross receipts, comprised of approximately €250,000 in Belfast (£210,000) and €41,000 in Utrecht. This is prior to adjusting for various effects (leakage, substitution, displacement, deadweight etc) that are a part of moving from gross receipts to an understanding of additional economic impact. These are exploratively modelled directly below, using Belfast's Action 3 "Challenge Call" as an example.

Strong caveats apply - it is still early stages as the current periods of support are in months rather than years, and so these interim findings are not intended to give certainty on exact figures, but rather to simply to explore indicatively whether local heritage has potential as a revenue-driving asset. The benefits model on the following pages is structured using common elements in economic impact assessments - a brief overview is given here as context (see document D5.1 "Common Impact Assessment Framework" for more).

Investment attracted

At Hub-Level, a total of some €837,000 funding has been attracted into the Hubs in the form of past matched funding and future Hub funding to assist with the commercial sustainability of the Hubs (N.B. some uncertainties remain until municipal budget rounds are complete, see below):

- *Belfast €70,000* (approximately, £50,000) from leveraging its networks and evidence to unlock matched funding towards the Waterfront Promenade Framework. This came from a mix of public, private and voluntary organisations (Department of Communities, Belfast City Council, Maritime Belfast Trust, Titanic Quarter Limited, Belfast Harbour, Tourism NI).
- *Utrecht: €642,000*, based on €164,000 contributions from the Entrepreneurs Fund Utrecht and €50,000 from the HUA's owners' collective, both committed to recur annually over the next 3 years, in relation to Action 1 "Supporting the Hub".
- *Lisbon: €125,000* (potential figures, based on estimates of upcoming funding rounds and applications TBC) comprised of: €25,000 municipal budget estimate for HUB-IN funding in 2025, and €100,000 municipal budget estimate for HUB-IN partners FABLAB and Mouraria Creative Hub.

And HUB-IN has partially enabled other projects to secure €84,000 funding by providing evidence and alignment (N.B. this funding does not go to the Hubs and can not be 100% attributed to HUB-IN, it refers simply to aligned projects in the HUA whose funding success was partially supported by the Actions).

- *Belfast: €70,000*, based on "Grey to Green" funding due to evidence in the Waterfront Framework to greenify one side of the bridge gateway to Maritime Mile, and the Waterfront Promenade Framework was also used to leverage funding from the Irish Government for a feasibility study for a bridge on the Maritime Mile.
- *Braşov €14,000 approx.* One of the members in the governance structure (KunSTadt) submitted a project for funding from Braşov Municipality and the complementary activities used alignment with the local HUB-IN Actions. The project was approved and is being implemented.

Example

See an example subset of the evaluation for Belfast's Action 3 "Challenge Call" directly below. It is based on Hub team data, analysis and commentary, with some support from WP5. Fuller details and context can be found in their D5.3 Evaluation Report.

Example: Interim Valorisation of Heritage as an Asset

Indicative exploration using Belfast's "Challenge Call"

Four of the six entrepreneurs attracted funding due to participating and showcasing in the Challenge Fund, modelled below (it is still early stages as the current assessment period is in months rather than years). Heritage is occasionally viewed as a liability from a funding viewpoint: something in which intrinsic value is recognised but can not be unlocked easily, or at least not without significant expenditure by municipalities. These interim findings from the Challenge Fund are not intended to give certainty on exact figures, but rather to simply to explore indicatively whether local heritage *has potential* as a revenue-driving asset. The benefits model on the following pages is structured using common elements in economic impact assessments - a brief overview is given here as context (see document D5.1 "Common Impact Assessment Framework" for more):

ENTREPRENEURIAL RESULTS (INTERIM)

SME RESULTS >

The supported innovators track and report changes to key metrics related to business growth (e.g. turnover, investment and funding) during and directly related to the intervention.

N.B. benefits can be subject to incubation periods - e.g. growing a customer base, building revenue channels, winning funding applications etc can take months and more. Ideally these could be tracked for at least a year and then annually. In HUB-IN timelines the periods are less than one year, so the findings are interim evaluations of early results, indicative only.

Application to the Action

SMEs reported £60,000 gained in funding that was "fully" attributable to the support, and £150,000 "partially" attributable (i.e. the support increased the likelihood or amount).

ADJUSTMENT FACTORS >

Reported benefits next need adjusted to account for whether benefits spill out of the intended target area or beneficiaries ("leakage"); compensate a loss elsewhere within a firm ("substitution"); compensate a loss elsewhere within the target area ("displacement"); or would likely have happened anyway from other support programmes or trends affecting the same beneficiaries ("deadweight"). They may also need to be normalised in terms of tax, such as figures including or excluding VAT to enable comparison. For fuller definitions see D5.1, only a summary is given here.

Surveys and Hub liaison with the innovating SMEs provided intel on appropriate adjustment factors. The Hub's selection process can minimise leakage and substitution by its design.

POTENTIAL FUTURE ECONOMIC IMPACT

EXTRAPOLATIONS >

Benefits are then extended to account for the likelihood of continuing for a period after the support ends ("persistence"). For example, skills gained in training may be retained after the training ends. Although benefits from any given intervention continue, they are expected to diminish over time ("decay"). Future benefits are discounted ("social rate of time preference") to reflect their lower present value. Comparisons of adjusted benefits to the municipality's costs can be made ("ratio to budget"). N.B. not all costs and benefits are in scope, the figure is indicative and interim only.

A conservative assumption is made that the Action's benefits may persist at the lower end of literature review ranges (3 years). Post-HUB-IN monitoring may reveal the actual persistence.

MULTIPLIERS >

Increased turnover for a firm means output is increased, and part of that increase requires purchasing additional inputs from their supply chain ("indirect effect"). It also requires staff who will spend part of their salaries in the wider economy ("induced effect"). Thus, increases in turnover flow through the wider economy beyond the original increase. National statistics agencies provide sector-specific "multipliers" to model these indirect and induced effects.

The revised benefits can be compared to the municipality's costs in a "ratio to budget".

Northern Ireland Statistics and Research Agency provides multipliers for the creative sector - for a £1 increase in output, the effect is £0.53 in supply chains, and £0.79 in the wider economy.

GROSS VALUE ADDED

Total output is a key metric for firms as the turnover generated can support jobs. However, it does not measure value created, as part of the turnover goes to purchasing from supply chains rather than new value-adding activity. Instead, "Gross Value Added" (GVA) is a measure that takes the final value of goods and services produced but subtracts the intermediate cost of inputs used in their production. This helps to understand the value created.

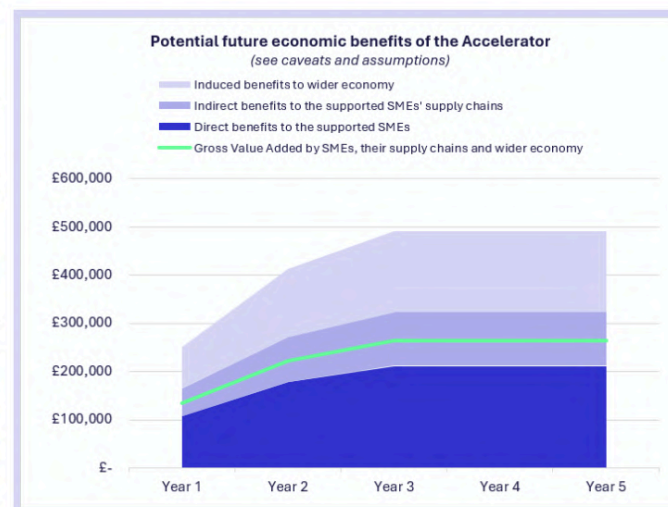
The revised benefits can be compared to the municipality's costs in a "ratio to budget".

Northern Ireland Statistics and Research Agency provides tables modelling the outputs and intermediate consumption in the national economy, with a GVA-to-turnover ratio of 0.54.

Based on early results, £1 of municipal cost may unlock £1.5 of benefits to the SMEs and £3.4 to the economy beyond the HUA - N.B. important caveats and limitations apply. The model is shown below. If benefits persist for 3 years per literature reviews (assumptions and sources below), then the SMEs may be expected to attract approximately £212,000 due to the support, after adjusting for displacement effects etc (see row P below). This could generate a further £112,000 for supply chains and £168,000 for the wider economy outside the HUA (rows T and U). These are presented in turnover terms as this is relevant to supporting jobs. As with any industry, the actual new *value added* to the whole economy is a smaller proportion: the Gross Value Added stimulated may be approx. £265,000 (about £1.8 for every £1 of municipal spend) (rows Y and Z).

Entrepreneurial results (interim)

Benefit type	Source / calculation	Fully due to the support received by the Challenge Fund	Partially due to the support received by the Challenge Fund	Total
BUDGET				
A Budget for the Action from the Municipality only (incl VAT)	Hub team			£ 144,000
B Budget for the Action from the Municipality only (incl VAT)	A			£ 144,000
SME RESULTS				
C revenues	SME surveys	£ -	£ -	£ -
D investment	SME surveys	£ -	£ -	£ -
E funding	SME surveys	£ 60,000	£ 150,000	£ 210,000
F Direct benefits to the supported SMEs (interim)	C+D+E	£ 60,000	£ 150,000	£ 210,000
SME RESULTS ADJUSTED				
G leakage	Application criteria	0.0%	0.0%	NA
H substitution	Application criteria	0.0%	0.0%	NA
I displacement	SME surveys	37.5%	37.5%	NA
J deadweight	SME surveys	8.3%	50.0%	NA
K Direct benefits to the supported SMEs (interim) (adjusted)	F*(1-G)*(1-H)*(1-I)*(1-J)	£ 34,375	£ 46,875	£ 81,250



Potential future economic impact

SME RESULTS ADJUSTED AND EXTRAPOLATED					Year 1	Year 2	Year 3	Year 4	Year 5	Total
L extrapolate period to 1 year	Assessment period (9 months)	1.3	1.3							
M persistence	Literature review	3 years	3 years		100.00%	100.00%	100.00%	0.00%	0.00%	NA
N decay	Literature review	linear	linear		100.00%	66.67%	33.33%	0.00%	0.00%	NA
O social rate of time preference	HMT Green Book	3.5%	3.5%		100.00%	96.62%	93.35%	90.19%	87.14%	NA
P Direct benefits to the supported SMEs	K*L*M*N*O				£ 108,333	£ 69,780	£ 33,710	£ -	£ -	£ 211,823
Q Valorisation-to-budget ratio*	P/B									1.5
SME RESULTS ADJUSTED, EXTRAPOLATED AND MULTIPLIED TO WIDER ECONOMY										
R indirect effect	NISRA	0.53	0.53							
S induced effect	NISRA	0.79	0.79							
T Indirect benefits to the supported SMEs' supply chains	P*R				£ 57,446	£ 37,002	£ 17,875	£ -	£ -	£ 112,323
U Induced benefits to wider economy	P*S				£ 85,806	£ 55,270	£ 26,700	£ -	£ -	£ 167,776
V Direct, indirect and induced benefits	P+T+U									£ 491,923
W Valorisation-to-budget ratio*	V/B									3.4
SME RESULTS ADJUSTED, EXTRAPOLATED, MULTIPLIED TO WIDER ECONOMY AND CONVERTED TO GVA										
X Ratio of Gross Value Added to turnover	NISRA	0.54	0.54							
Y Gross Value Added by SMEs, their supply chains and wider economy	V*X									£ 264,848
Z Valorisation-to-budget ratio*	Y/B									1.8

Table B1: entrepreneurial results and potential future economic impacts. Prices are £2023/24. N.B. interim and indicative only - see caveats and assumptions.

Other scenarios are possible, as the accuracy of potential impacts may vary as data and assumptions are refined over time - for example if the benefits extends to 5 years, as with some interventions (see assumptions and sources below), then there may be approximately £311,000 of direct benefits to the supported SMEs and £722,000 when including supply chains and the wider economy (see chart “mid” below). If the benefits then also only decay at 10% per year, as per some literature, then the SMEs may have over £408,000 in direct benefits (see chart “higher” below). Importantly, the nature of the support affects how much can be attributed to it - the SMEs should be able to develop profitable heritage-based innovations but not at the expense of being *less* profitable in other areas of their operations (substitution) or duplicating other support programmes (deadweight), otherwise the SMEs’ benefits may be lower than what the municipality spends on the intervention (see chart “low” below).

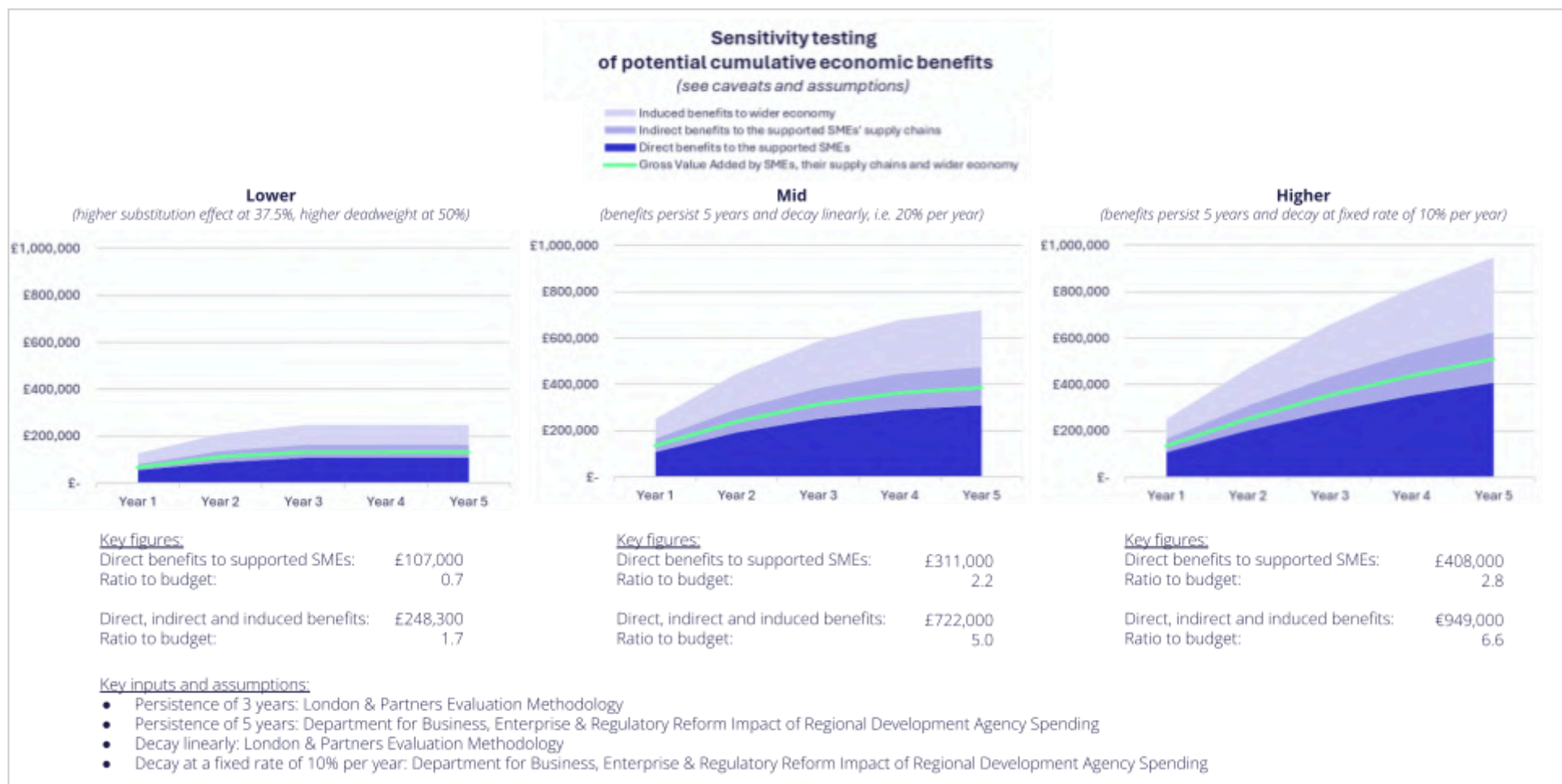


Figure B1: sensitivity testing of potential cumulative economic benefits (approximate rounded figures only, see caveats and assumptions)

Assumptions are noted here, and ones with low data confidence (e.g. because it is too early for medium-term results etc) are considered in the sensitivity tests above.

Assumptions on adjustment factors	Data confidence
Leakage: expected minimal due to the intervention design, because the Action has a dedicated approval process to select only CCI entrepreneurs in the HUA and a training offering precisely focussed on embedding heritage into products and services.	High
Substitution: expected minimal because the training should foster skills in heritage-based innovation, and not at the expense of becoming less skilled in other business processes. The “lower” sensitivity test considers the results if there is “some” substitution (in the London & Partners evaluation methodology referenced in the D5.1 Common Impact Assessment Framework, options range from “None at all” to “All”, with corresponding values of 0%, 12.5%, 37.5%, 62.5%, 85.5%, 100%).	Low
Displacement: considering whether SME success would simply displace revenues from competitors, most SMEs were unsure of whether they had or would have competitors, but the median survey response for those who did estimate was “some” (in the appendix evaluation methodology this is a reduction of 37.5%).	Med
Deadweight: surveys asked the SMEs if they could have received the same support in the same time frame with a different provider; or simply at a later date; or simply of a lower quality; or not at all from any other provider. In the evaluation methodology followed, each response is assigned a percentage value from 0% to 100% deadweight. The weighted average of responses is 8.3% - this value is used for benefits “fully” attributable to HUB-IN. Benefits “partially” attributable to HUB-IN by their nature have at least some other causes at play, and so are given a value of 50%. The “lower” sensitivity test considers the results if benefits that the SMEs take as “fully” due to HUB-IN were in fact partially due to other causes as well, and given a value of 50% per the evaluation methodology referenced.	Med
Assumptions on extrapolations	Data confidence
Persistence: assumption that the longevity of improved benefits from skills, networks, knowledge, attractiveness to funders and financiers etc is at least as comparable to the longevity of job creation from other interventions. We use the same proxy (3 years) as London & Partners do in their city incubator evaluations, which already takes the lower end of an estimated 3-5 year range. ⁴ ⁵ Longer persistence (5 years) is considered in the “mid” and “high” sensitivity tests.	Low
Decay: assumption that decay of skills, networks, knowledge, attractiveness to funders and financiers etc is at least as comparable to the decay of job creation from other interventions. We use the same conservative proxy (linear) as London & Partners do in their city incubator evaluations. Slower decay rates (10% each year) are considered in the “high” sensitivity test.	Low
Social rate of time preference: national governmental bodies often set the standard rates for discounting to be used when considering future benefits and costs. In the UK, HM Treasury gives guidance to use a general discount rate of 3.5%, composed of annual per capita growth of consumption, elasticity of marginal utility of consumption, and pure time preference and risk.	High
Multipliers are derived from Northern Ireland Statistics and Research Agency’s (NISRA) “input-output” tables ⁶ and the “Creative, arts and entertainment services and libraries, archives, museums and other cultural activities” sector chosen as the most relevant sector to the SMEs and HUB-IN’s focus.	High
Other assumptions	Data confidence
Based on consultation with economists, VAT is included in the economic benefits and the intervention’s budget, so that a like-for-like comparison can be made (i.e. both are treated equally in terms of the influence of tax). The purpose is to enable a comparison of market values of where that budget could be spent. SME gains in investment and funding are treated as equivalent to revenues for the purposes of impact assessment on the assumptions that these are a proxy for future market demand (revenues) and that they are treated as working capital by the SMEs (i.e. spent in supply chains and staff wages, and thus also subject to cross-sector multipliers etc). Successfully attracting funds and investment is also perhaps part of an important “flywheel effect” - entrepreneurs can use their outputs as a further evidence-base to attract further economic resources.	Med

Table B2: assumptions used to assess the potential future economic impacts

⁴ https://files.londonandpartners.com/l-and-p/assets/evaluation_methodology_2021.pdf

⁵ <https://webarchive.nationalarchives.gov.uk/ukgwa/20090609050004/http://www.berr.gov.uk/files/file50735.pdf>

⁶ <https://www.nisra.gov.uk/publications/ni-economic-accounts-project-2018-and-2019-experimental-results>

Some limitations apply due to the interim stage and data availability - the figures above are indicative only and to be interpreted with caveats. The purpose of this model is not a finalised investment-level business case, but an interim and early exploration to understand if there is local potential for “heritage as a revenue-driving asset”. Annual data collections and modelling can be taken further by pilot or follow city Hub teams in future if they have appetite, budget and capacity. Limitations include:

- *remote monitoring of the entrepreneurs*
Hub teams collect data to inform the adjustment factors (from surveys and focus groups etc). The remote nature of monitoring may make it difficult to verify data, as there are many “links in the chain” of data collection (from Work Packages to city teams to Open Call organisers to applicant organisations to staff respondents, etc). An annual assessment of SME revenues was not feasible due to timelines being less than one year, and any auditing by third parties is not feasible for this scale of intervention or monitoring scope. Thus, monitoring relies on self-reported data from the SMEs. Although this can be subject to errors in perception, it is at an appropriate level to understand the overall benefits potential and direction of travel.
- *non-exhaustive figures:*
The figures in Table B1 above are based on available data to date, yet there may be other benefits and costs not available in that data set. E.g. additional social value of the heritage-products fostering a deeper sense of place and connection, or contributing to the future frequency of visits to the HUA, etc. And additional costs from other actors outside of the municipality who may donate time, equipment or services due to flywheel effects unlocking wider contributions. If future cities have the appetite, budget and access to researchers, they could measure these in future replications of the Actions.
- *timelines less than 12 months*
Benefits can be subject to incubation periods - e.g. growing a customer base, building revenue channels, winning funding applications etc can take months and more. The period of HUN-IN support assessed is less than 12 months. This is not long enough for annual or multi-year pre- and post- comparisons of business accounts to reveal medium-term changes in turnover, exports, jobs etc. As the surveys found, the value of the HUB-IN support lies in establishing the business foundations that enable and support future growth. Ideally these could be tracked for at least a year and then annually, and the Hub has tools to monitor growth annually post- programme in the future.
- *(benefits) ratio to budget*
Given the limitations above, standard phrases such as “Benefits Cost Ratio” or “Return on Investment” are avoided because these have a specific usage. At this early stage of evaluation, it is not meaningful to reduce all analysis to one number - this would give excessive dependance on such value numbers which need to be contextualised in the commentary above. A “ratio to budget” is provided, to indicate the scale of interim benefits to municipal costs only, to reflect the interests of Follower Cities’ municipal teams exploring the potential to catalyse creative hubs and “flywheel effects” that attract wider resources into the area.

Key external inputs include:

- Persistence of 3 years: London & Partners, Evaluation Methodology (used for SME support programmes to account for adjustment factors as referenced in D5.1)⁷
- Persistence of 5 years: Department for Business, Enterprise & Regulatory Reform Impact of Regional Development Agency Spending⁸
- Decay linearly: London & Partners, Evaluation Methodology⁹
- Decay at 10% per year: Department for Business, Enterprise & Regulatory Reform, Impact of Regional Development Agency Spending¹⁰
- Social Rate of Time Preference: HM Treasury, The Green Book (2022)¹¹
- Multipliers: NISRA, NI Economic Accounts Project¹²

⁷ https://files.londonandpartners.com/l-and-p/assets/evaluation_methodology_2021.pdf

⁸ <https://webarchive.nationalarchives.gov.uk/ukgwa/20090609050004/http://www.berr.gov.uk/files/file50735.pdf>

⁹ https://files.londonandpartners.com/l-and-p/assets/evaluation_methodology_2021.pdf

¹⁰ <https://webarchive.nationalarchives.gov.uk/ukgwa/20090609050004/http://www.berr.gov.uk/files/file50735.pdf>

¹¹ <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government/the-green-book-2020>

¹² <https://www.nisra.gov.uk/publications/ni-economic-accounts-project-2018-and-2019-experimental-results>

3.2. SOCIAL IMPACTS

HUB-IN's longer-term impacts are not expected to materialise in its short-term project durations.

Further, the impact assessment model follows principles of relevance and proportionality that filtered advanced statistical techniques from being within the remit of the local Hub teams' monitoring plans. For example, and as set out in D5.1 Common Impact Assessment Framework, full-scope Social Return on Investment studies, randomised controlled trials, full population surveys, two-sample tests for significance etc were found in the scoping phase to not be appropriate for the experimental actions being explored by the cities, or the experience and comfort levels available within the Hub teams on data analysis.

Nevertheless, cities did aim to monitor and understand changes in cultural awareness from public events, changes in behavioural intentions regarding the HUA, feelings of belonging, and sense of identity. These are often conducted on a neighbourhood or per-event basis so are not taken to provide definitive, statistically significant inferences for the city's wider population. However, they do aim to provide city teams with insights on what works well and what doesn't work well, for which stakeholder groups, to inform adaptations and / or future replications of their Actions. Early findings are included here, some of which are inextricable with cultural benefits (e.g. sense of place), and more general progress and challenges are further expanded in Section 4 "Progress Towards the Programme's Theory of Change". N.B. to avoid duplication and for reasons of practicality, not all 29 pilot city Actions can be referenced fully here and therefore a summarised subset of references is made - see the cities' D5.3 Evaluation Reports for fuller details.

Social inclusion

Public demonstrations typically attracted balanced demographics, but varying by HUA. For example, Nicosia's Heritage Walks saw 99 respondents return a post-walk survey: most were female (77%), under 55 (84%) and from outside the HUA (98%), inviting discovery of the walled historical centre. In a Demo Day for the innovated outputs of Slovenska Bistrica's "Crouzet Accelerator", 22 responded out of approximately 30-40 visitors - half were local residents (living in or near the HUA), supporting the Hub team's ambitions that a fair proportion of awareness benefits are disseminated locally. The majority of ages were over 45 (78%), and also a majority female (77%). Belfast's "Challenge Call" innovators engaged over 600 users including from local communities, and collected over 37 local and "hidden" stories related to the Maritime Mile's unique local cultural heritage. There was a high proportion of females involved in the Challenge Fund projects (user testing groups etc) at 68%, which is higher than the Northern Ireland demographics (51%, source: NISRA), and further, 40% were aged 65 and over (N.B. this result does not fully reflect the gender and age balance as people under the age of 18 were not surveyed due to requirements of parental consent). Lisbon's Pop Ups were held over two days with a total of approximately 250 visitors, 42 of whom were surveyed: predominantly female (70%) and most coming from the Lisbon metropolitan area (55%), suggesting that the benefits of the knowledge sharing extends outside the HUA to visitors from other areas who can learn about the HUA's unique artisan heritage. The responses indicated a diverse age group, with the largest group being between 25 to 34 years old (43%) and 35 to 44 years old (33%). Other cities have similar variances in demographics for their events across the 29 Actions, and often were interested in slightly different data sets. Not all are replicated here for sake of length - see the cities' D5.3 Evaluation Reports for fuller details and context.

One of the unexpected negative results is some lack of participation from isolated communities.

This may be dependent on the unique content and socio-economics of the HUA. For example, Lisbon found a lot of local smaller cultural communities with very little interconnection with others. In the case of the Mouraria neighbourhood, there are more than 70 different nationalities of residents with very different cultural patterns. This indicates the complexities that HUAs operate under, and that collaboration with local associations already in contact with these communities is essential to mitigate problems of community involvement and participation.

Accessibility

Accessibility was often an issue in HUAs, though some adaptations supported fuller participation (accessibility here means in terms of the HUA being walkable for people with all types of physical ability). For example, respondents on Nicosia's Heritage Walk pre- and post- surveys reiterated the view that the

city-centre has small and narrow pavements, which makes it difficult for people with disabilities to visit and join the walks. The walks themselves can not change these known challenges with physical infrastructure, but can promote accessibility in the route design - 68% of post-walk respondents reported the walks had increased accessibility and inclusion "a lot" or "extremely" (99 respondents to over 1,000 walkers surveyed). This statement is also supported by the demographics, which shows a diversity in gender, age and residency among the participants. A special walk was also organised towards the end of this activity, addressed to deaf people / people with hearing impairments. Tour guides and walkers recognise more is needed though on physical infrastructure.

Three innovators also proposed granular innovations directly related to inclusion and accessibility.

For example, Intermodal and Palácio das Pipocas from Lisbon's Action 2 "De-incubator" respectively mapped accessible routes for people with disabilities to take though the winding and heavily staircased HUA, and explored services for HUA homes to welcome travellers who are accompanying a family member undergoing temporary hospital treatment and have nowhere to stay. Unspecial Tours experimented with a service for blind, special needs and mobility-impaired people to visit and experience tourist destinations and cultural heritage to the full. It is too early for them to have reached large customer bases, revenues, or measurable social impacts with their work, as they are early stage prototypes.

Cultural awareness and sense of place

For sense of place, there were some indications of stimulating connections to local heritage. For example, Lisbon's Heritage Pop Up assessed its impressions on visitors through surveys (42 responses out of approx 250 visitors over 2 days), and gained an understanding on how it contributes to an awareness of local history, through contact with its rich ceramics traditions. About 2 in every 3 responded that the Pop Up demonstrated the diversity and quality of the ceramics from Colina do Castelo (64%) and - importantly - actually inspired a desire to reconnect with ceramics (60%). About half responded that the Pop Up revealed the historical and artistic heritage of Colina do Castelo (55%) and that it made the link between the historic industrial heritage and contemporary ceramics (50%). Taken together, these suggest at least some change in participants' sense of place regarding Lisbon's ceramics history. Only 2% of the respondents were from the HUA, so on a broad assumption that this is representative enough of the attendees, the learnings are being disseminated beyond the HUA (55% were from the wider city, 19% from the wider country, and 24% international visitors). 10 were migrants participating in the Pop Up events, supporting the Hub's aim of promoting social integration of migrants due to knowledge sharing events.

Well-being

Further, some (ongoing) co-creations aimed to support physical and psychological safety. Braşov aimed to set the foundations for Action 3's "Immersive Night-time Experience" in the HUA through improved and strategically designed lighting in a HUA. The lighting will involve a technical aspect, such as types of lighting permitted, efficiency standards etc. However, participants in the survey (91 responses) indicated feelings of insecurity: that the HUA is unsafe at night due to poor lighting, leading to encounters with wild animals, stray dogs, and potential wrongdoers. They wanted better lighting to create a sense of safety - these feelings of physical insecurity are a major reason for not visiting the HUA at night, and largely driven by the lighting issues which exacerbate a lack of law enforcement in the areas. The subsequent activity involved evaluating existing lighting conditions and developing a master plan with conceptual designs and technical specifications. Guidelines were established for street, commercial, and architectural lighting to ensure harmony with the historic environment. The strategy was unanimously adopted by the Local Council in February 2024, and the Municipality of Braşov released a new regulation for advertising, publicity and display activities within the city, which is currently in the approval stage (not yet adopted in the Local Council).

...as well as well-being driven by (serendipitous) connections and social interactions. For example, the urban furniture designed by Braşov "City as a Classroom" installed QR codes on each object to raise awareness and capture feedback. As responding to the survey relied on public goodwill, responses were limited (15). But they give insights into ways the furniture is used:

- *a slight majority (53%) strongly agreed on the furniture's ability to invite relaxation:* which indicates some positive impact on creating non-tourist resting spaces within the public squares.

- *3 in 4 give positive feedback on the urban furniture encouraging interactions:*
this indicates some success in fostering social engagement among visitors, in terms of spontaneous interactions with other people or passersby whilst testing the urban furniture. 3 in 4 are also likely to recommend the furniture to others - this positive feedback reflects the likelihood of word-of-mouth promotion and community engagement discussions stimulated by the furniture.
- *the vast majority feel safe using the furniture*
91% agree or strongly agree, although the remainder strongly disagree - i.e. there is no middle ground in this view.

Behavioural change

Importantly, a proportion of respondents indicated intentions for new behaviours too: about a third of the Lisbon Pop Up respondents indicated they would visit the HUA more frequently (38%), and again about a third join local art or culture clubs in the HUA (36%). Assuming the participants follow-through, the two-day Pop Up is driving at least some increase in visits and participation in cultural groups in the HUA, with the attendant knowledge sharing and network-building that that may entail.

Heritage Walkers in Nicosia experienced one or more of ten walks themed on the HUA's its Middle Ages transformations and royalty; to its dynamics between religious power and wealth; to local theatre; to emerging from a conflict-fuelled pasta into an evolving multicultural future; and more. In post-walk surveys (99 respondents out of over 1,000 walkers), a majority scored on a scale of 1 to 5 to what extent the walks had increased their sense of pride in Nicosia, where 1 = "not at all", and 5 = "extremely". A majority (69%) reported an increase by "a lot" or "extremely". Only 5% responded "not at all". About half gave feedback that they would participate in more local events as a result (54%), and likewise for showing more interest in the HUA (50%). For Action 3 "Interactive Activations", a slightly lower increase in sense of pride than the walks - 54% reported an increase by "a lot" or "extremely" - but still positive overall.

Example

See an example subset of the evaluation for Nicosia's Action 2 "Heritage Walks" directly below. It is based on Hub team data, analysis and commentary, with some support from WP5. Fuller details and context can be found in the city's D5.3 Evaluation Report.

Example: Improved knowledge for residents, visitors, tourists

Nicosia's "Heritage Walks" dashboard findings

Heritage Walk respondents were mostly female, under 55 and from outside the HUA. Typical visitors might spend 1-3 hours in the HUA (77%), excluding the walk. Whilst the walks were not directly targeted at increasing spend, about 40% spend nothing, 60% "less than €50" and 1% more than €50 on a typical visit.

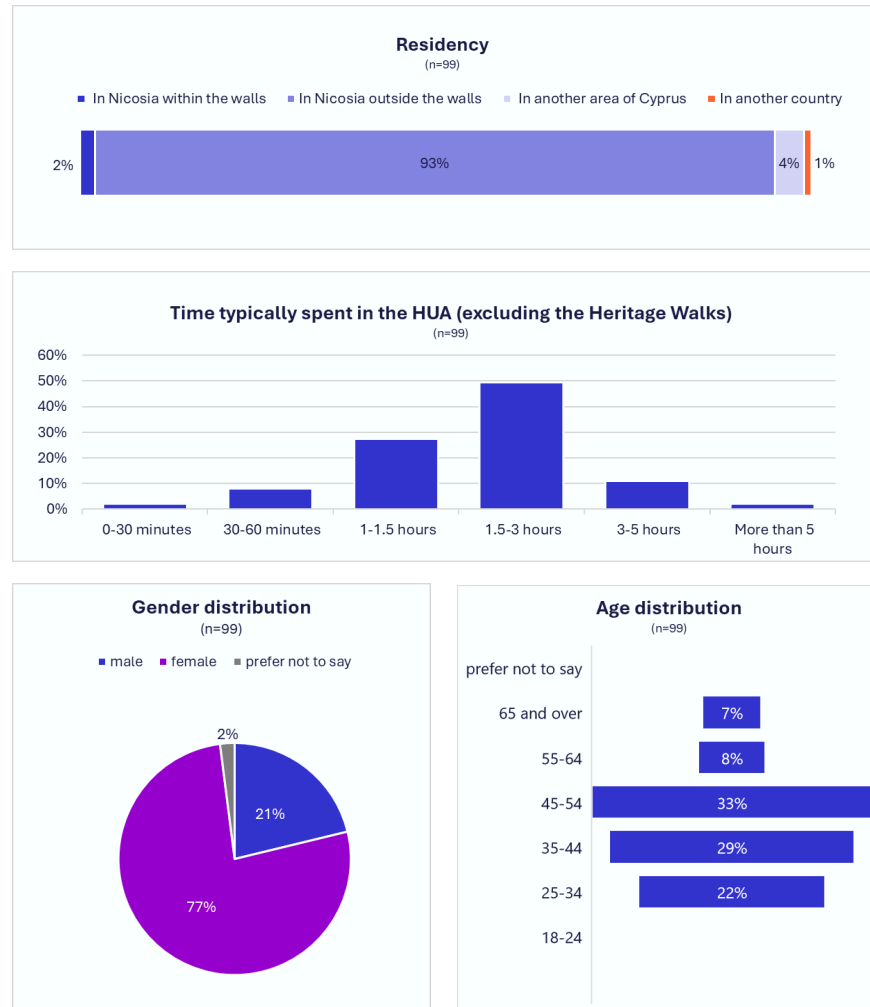


Figure N1: demographics of the walker respondents

Out of 1,186 walkers, 99 respondents returned a post-walk survey (8%), giving some partial insights into the demographics and validation of the walks. Insights are shared below (see Figure N1, N.B. limitations on sample size).

A majority from outside the HUA, yet inside the city (93%), suggesting that any resultant benefits (such as gains in awareness of heritage or CCI) will disseminate and be retained locally rather than to tourists who take any new knowledge away when they leave. 5% of respondents do class themselves as resident either outside Nicosia or in another country.

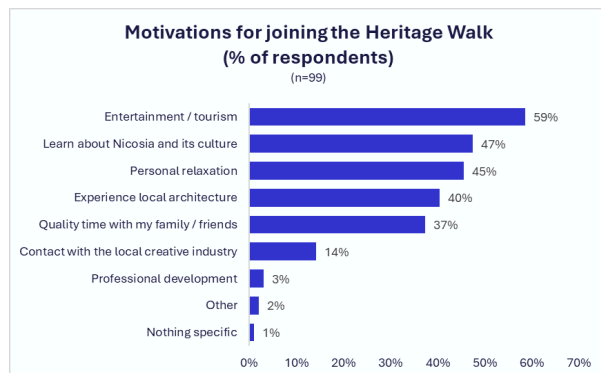
A mainly female base, with almost 80% women. Almost exactly half are below 35 and half over, with every age range reflected by respondents except 18-24 (children were not surveyed). Overall, the vast majority (90%) are younger than 55, perhaps given the exercise requirements and some challenges with street accessibility (see below).

The walks demonstrated some ability to attract new visits to the HUA that day, as only 25% of respondents stated that they would have visited the HUA regardless of the Walks: the remaining 75% would either have visited somewhere else in Nicosia, somewhere else in Cyprus or stayed home. Interesting are also the results drawn from the pre-questionnaire participants had to fill during registration, which highlight the need for such an Action within Nicosia HUA, and confirm that the goals set have been reached. According to them:

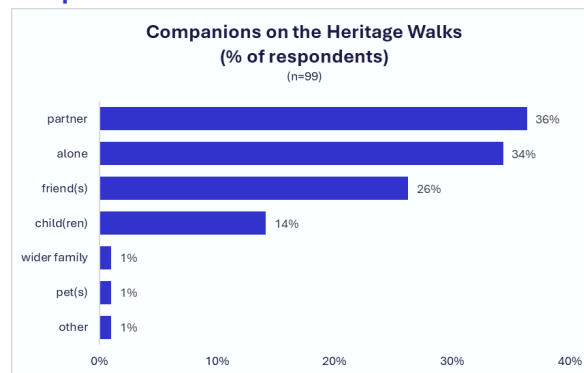
1. *there is insufficient knowledge about Nicosia's history and culture (~60% know very little about it)*
2. *people visit the area sporadically during the year (~60% visit the area a few times per year)*
3. *walking in the area is limited (~40% walk in the HUA a few times per year largely because of constraints, such as the narrow pavements, the heatwaves, and the lack of adequate infrastructure)*

Most are not initially motivated by meeting creatives but do later report that as an important aspect, as well as new behaviours inspired by the walk, for example telling family and friends about the walk, participating in more local HUA initiatives, visiting the HUA more often etc:

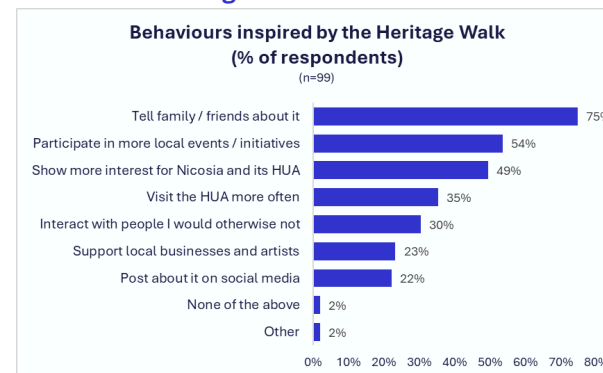
Motivations



Companions



Behavioural change



Interesting insights from the post-walk survey include that the majority of those registered to the Walks joined for some personal entertainment (59%), to learn about Nicosia and its culture (47%), for personal relaxation (45%), to admire the local architecture (40%), and for quality time with family / friends (37%). Respondents could also have multiple motivations - each having more than two motivations on average.

Relevance to replication / scaling: “contact with the local creative industry” is not high on visitors’ motivations (14% identifying it), yet feedback identified “promotion of CCI” as important *after* the Walk. Walk organisers can consider whether contact with creatives should be emphasised as an attraction, or if it has maximum impact as an unexpected discovery for walkers.

The walks were most attractive to couples and solo-walkers (36% and 34% of respondents respectively), though there is also a family element to them too: more than one in ten adults were there with their children (14%). Respondents could also select multiple companion types - on average about one in ten walkers was with multiple types (e.g. friends and family; or partner and children).

Relevance to replication / scaling: some interest expressed in the respondents’ feedback for family-friendly walks. And more accessible walks - Nicosia’s city-centre has small and narrow pavements, which makes it difficult for people with disabilities to visit and therefore join the walks. Actions on behalf of the Municipality are undergoing towards solving this issue and promoting inclusivity.

A high proportion of respondents stated that the walks motivated them to participate in more local events and initiatives (54%), dive deeper in Nicosia’s history and culture (49%), visit the city within walls more often (35%), support local businesses and artists (23%) (which happened to some extent during the walks, according to respondents) and interact further with the local community (30%) meaning to develop synergies and grow networks.

Relevance to replication / scaling: the most reported behaviour inspired is to tell friends and family (about 3 out of every 4 walkers) suggesting walkers may become willing disseminators of knowledge gained on the walks, with word-of-mouth more important than posting on social media (2%). Ideally, this can be used to encourage others to visit the walks, thus expanding their reach.

Figure N2: motivations, companions and inspired behaviours of walkers (N.B. respondents may select more than one option, so the totals will show greater than 100%)

Walk respondents also demonstrated an overall positive change in key benefits:

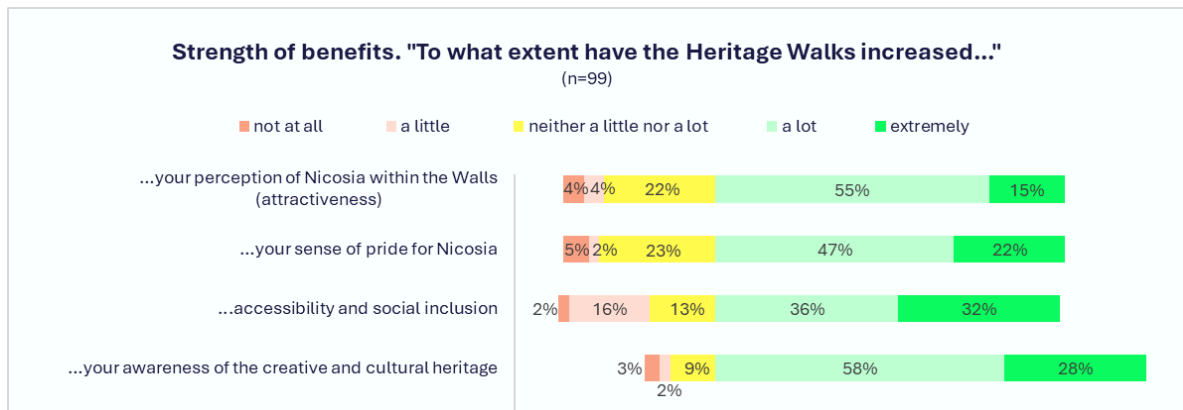


Figure N3: strength of benefit from the Heritage Walks

Main findings from the Hub team on Figure N3 include the below, with key drivers of the change attributed to the strong sense of community-based storytelling and the diversity of Walking Guides' background:

- Positive changes to respondents' perception of Nicosia and its cultural heritage** thanks to the Walks, and their sense of pride has increased dramatically (based on the post-walk evaluation survey). According to the same survey, the Walks indeed helped enhance city-visiting and promote social interaction within the HUA, also in promoting the Cultural and Creative Industry in the area. About 1/10th of the participants of the walks completed the post-evaluation survey (99 respondents out of 1,186 walkers).
- Increased walking opportunities in the old town of Nicosia, combined with storytelling.** The walks were nothing like the usual city-tours we all know. The interactivity and theatricality infused in the majority of them were the elements that stood out and caught the attention and interest of those that finally participated. For instance, qualitative data from the post-walk evaluation, refer to the walks "The Kings of Nicosia" and "Nicosia's MasterPlan", whose theatricality was reported to the Hub team as an absolute joy for kids and adults alike. Increased visiting is also confirmed from the expected behaviour changes as can be seen above in Figure N2.
- Increased visibility of Cultural and Creative Industries.** Landmarks of the Walks included many cultural and creative institutions in the area, thus participants could learn about them and come back for them, on another day, after the walk. 86% of those who participated in the post-survey reported their awareness of the Cultural and Creative Industry of the area increasing "A Lot" or "Extremely". Whether this translates into sales and revenues for the local CCI remains to be seen in the medium-term: about 1 in 4 walkers (23%) said that the Walks inspired them to support such businesses in Nicosia HUA (see Figure N2).
- Increased sense of community participation.** Insights from the post-evaluation survey show that the participants were inspired to participate in more local events / initiatives in the HUA (54%), to dive deeper in Nicosia's history and culture (49%), to visit the Nicosia HUA more often (35%), and to support local businesses and artists (23%) (awareness of Creative and Cultural Industries is the highest ranking benefit in the eyes of the respondents), and interact further with the local community (30%) meaning to also develop synergies and grow their network (see Figure N2).
- Increased sense of pride.** According to the post-evaluation survey, 47% and 22% felt that the Cultural Walk had affected their sense of pride in the walled city of Nicosia "A Lot" and "Extremely" respectively. This benefit scores fourth overall in terms of importance to respondents, after awareness of culture, awareness of CC and accessibility / social inclusion.

- Increased accessibility to different groups of people.** According to the post-evaluation, 36% reported the Heritage Walks increasing the accessibility and social inclusion “A Lot”, and 32% reported “Extremely”. This statement is also supported by the demographics section above, which shows a diversity in gender, age and residency among the participants. It is worth mentioning that a special walk was also organised towards the end of this activity, addressed to deaf people/people with hearing impairments.

*“I got to know **places I didn't even know existed**. I will go again with family / friends.”*

Walker

Some low or neutral results were also received about the benefits - including for accessibility which drew the most lowest scores (18% “Low” or “Very Low”, see Figure N3 above). This is supported by some qualitative comments relating to infrastructural challenges (narrow pavements etc) that hinder easy accessibility.

*“**Nicosia “lags behind”** quite a bit in terms of accessibility for people with disabilities and more specifically for people in wheelchairs. As a tour guide, I don't have many options for where to take and guide people in wheelchairs. Sidewalks, paving, entrances, etc.”*

Tour guide

*“The route to some distribution points is **not accessible** for people with mobility problems.”*

Walker

The Walks may have potential for attracting and stimulating visits to the HUA: 3 out of 4 walkers would not have visited the HUA if the walk had not been happening. Only 25% would have visited the HUA regardless; 10% would have visited elsewhere in Nicosia (i.e. displacing visits from other parts of the city; 19% would have visited elsewhere in Cyprus, and most of the rest (43%) would have simply stayed at home.

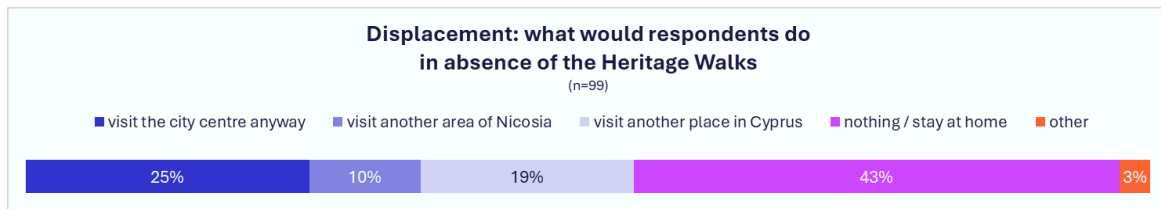


Figure N4: extent to which the walks “displace” visits from other parts of Nicosia / elsewhere

The walkers' experiences suggest positives and challenges across the Entrepreneurial Ecosystem of a HUB-IN place.¹³ Any Action is expected to have differing views amongst participant, and these offer useful areas for consideration in future replications and scaling:

Leadership: political tensions can be stimulating, or create uncertainties needing actively managed

"There was no information about the necessary **possession of an identity card** [in the occupied area of Nicosia]."

"I benefited from an update on **historical events** that I was not aware of"

"[What was negative was] frequent references to **political events** which could be said otherwise without conveying the **personal beliefs** of the creators of the walk."

"[I benefited from] familiarity with historical areas in the **occupied area** of the city."

Urban Culture: inclusivity can be strengthened by building on the family-friendly aspects

"[I benefited from] engaging my **eight-year-old** in an interesting and educational activity."

"We came into contact **as a family** with aspects of the Cypriot history that we were not aware of."

Knowledge: residents may discover places they didn't know, but some scepticism may also be present

"I got to **know my city better** and loved it even more."

"[I benefited from] **socialisation**, pleasant moments with interesting people, **education** in culture."

"I got to know places I didn't even know existed. I **will go again with family / friends.**"

"We learned about things and places that we **wouldn't have learned about** otherwise."

"I think that the said walk had **nothing interesting** and new to offer to the average Cypriot and more specifically to the average resident of Nicosia who has taken a walk or two in the city. More interesting information was needed. It's a worthwhile venture, but I think it needs more work and research to win over participants."

"It was interesting because it didn't repeat things we already knew. It was also interesting because it was **interactive.**"

"I got to know the **beautiful old town** of Nicosia better."

"Unfortunately this walk was a **failure!**"

Heritage: walkers appreciate learnings about building exteriors, but also desire to enter inside

"I **noticed buildings** and historical places whose history I did not know."

"[A disadvantage was that] there were no guided tours **inside the buildings.**"

Physical Infrastructure: accessibility constraints may need addressed for those with disabilities

"The route to some distribution points is not accessible for people with **mobility problems.**"

"It would be difficult for people with **disabilities.**"

¹³ <https://hubin-project.eu/library/hub-in-framework-overview/>

3.3. ENVIRONMENTAL IMPACTS

HUB-IN's longer-term impacts are not expected to materialise in its short-term project durations. For example, successfully integrating cultural heritage into addressing global challenges in climate change. As with the economic and social impacts, HUB-IN is also one of many factors at play in such impacts.

Nevertheless, cities did aim at some environmental considerations in their Actions. Early findings are included here, and more general progress and challenges are further expanded in Section 4 "Progress Towards the Programme's Theory of Change". N.B. to avoid duplication and for reasons of practicality, not all 29 pilot city Actions can be referenced fully here and therefore a summarised subset of references is made - see the cities' D5.3 Evaluation Reports for fuller details.

Several SMEs reported increased environmental skills, even if not the focus of their products.

In Lisbon's Action 2 "De-incubator" 100% of respondents left the accelerator scoring their skills in "entrepreneurship and innovation that is environmentally sustainable" as either "high" or "very high" (on a 1-5 scale from "very low" to "very high"). In contrast, 57% had entered the accelerator scoring their same skills as either "low" or "very low" (sample of six respondents). During the acceleration programme, the pillar of sustainability and its relation to cultural heritage and entrepreneurship were present in all the activities. None of the innovators' projects were directly related to environmental innovation, yet this now appears to be at least a partial skill set in the supported entrepreneurs. In Belfast, the "Challenge Call" innovators left split equally between "mid", "high" and "very high" self-assessments in this skill (sample size of six), whereas before the accelerator a third (two respondents) rated their skills "low" and the rest "high".

Some innovators did directly target sustainability, such as recycled aluminium jewellery workshops in Slovenska Bistrica's Action 2 "Crouzet Accelerator". The jewellery is based on traditional metalworking techniques passed down from generation to generation and materials come from a local aluminium factory (2kg/year), contributing in a small way to the local ecosystem and reducing impact on the environment (local transport of materials). Any unused material is returned to the factory for melting and production, establishing a zero-waste cycle. These workshops not only promote eco-friendly practices but also provide a platform for artistic expression through wearable art, utilising materials sourced from the HUA's local environment. The supported innovators are mostly in the very early stages of their entrepreneurial journey, too early to have attracted revenues. Similar to Lisbon, 100% of respondents left the accelerator scoring their skills in "entrepreneurship and innovation that is environmentally sustainable" as either "high" or "very high" (on a 1-5 scale from "very low" to "very high", sample size of four), although three of the four had already scored "high" or "very high" prior to entering the accelerator, and the remaining one considered their skills only intermediate.

Community participants reported the value of environmental interventions in HUAs, although this is not the same as them having developed related entrepreneurial skills themselves, or the actions generating sustainable results. For example, in Lisbon's Sprout Tank's Mocathon, proposals for readapting the 70-year-old municipal wash house frequently referenced local environmental challenges such as heat island effect, water consumption, biodiversity loss and food production. About 9 out of every 10 participants reported an increased awareness of sustainable solutions for heritage in urban areas due to the project (89% out of 19 respondents). Slovenska Bistrica's Small Local Projects' "map of wishes" produced by the 29 members of the local community promoted ideation on opportunities for the development of the heritage Crouzet space and its role promoting and enabling interactions with the community. Within the community's wishes were concerns for waste management and more green spaces. 100% of post-action survey respondents agreed that the placemaking actions should be repeated, with one respondent commenting on the simple need for them: "because someone has to" (small sample of 6).

Co-designed strategies and policies leveraged the environmental concerns of the co-creators. For example, Utrecht's Action 1 "Supporting the Hub" supported the professionalisation of the BKC creatives hub and improvements in their capacity for HUA interventions. Entrepreneurs and businesses in the area expressed in the focus groups the following perception: from within, it is felt that clear initiatives have been taken to achieve improved organisation. This process still needs to be completed and approved by the members: steps are being taken for greening and much more attention has been paid to (traffic) safety in the area in order to significantly improve the overall experience for businesses and their visitors and customers. Specifically, plans include planting extra trees and shrubs (this will cause a few parking spaces to disappear) and creating green strips / wadis on Gietijzerstraat and Walsenrijstraat to collect rainwater.

The "Waterfront Promenade Framework" in Belfast recognises that the Maritime Mile is itself a blue asset, and its future development needs done in close connection with its ecological value and services. Three unique typologies now guide the connected development of the HUA's future waterfront, based on shoreline typology, building density and programming:

- *urban* hard shoreline and higher building density
- *maritime* hard and soft shoreline and interest-specific attractions
- *natural* soft shoreline and recreation attractions

A versatile 'toolkit' of interventions forms the starting point for solutions in each typology, including for example: onsite renewable energy generation (solar, wind, tidal); waste management programmes; sustainable drainage systems that mimic natural processes; cycling infrastructure to encourage modal shift away from petrol vehicles etc. A key principle is to maintain a "living shoreline": environmental engineered shorelines create access to the water, fostering a sense of connection and responsibility whilst also supporting the harbour's ecosystem services.

Their Action 2 "Sustainability Audit" linked in with this aspiration by delivering a comprehensive sustainability audit to understand the current sustainability agenda on the Maritime Mile. Academic, community, private, public and voluntary sectors were all represented across the 37 participants, and collaborative future projects were identified including "boosting leadership on sustainability issues" (establishing a joint, green subcommittee or working group for overseeing the sustainability agenda and to establish joint funding, procurement and resource sharing opportunities), and "establishing formal sustainability credentials for the Maritime Mile" (progression towards an official sustainability certification and destination accreditation, based on criteria from the Global Sustainable Tourism Council that could benefit investment, visitation, and marketing opportunities). Other projects were also identified.

The lighting masterplan in Braşov's Action 3 "Immersive Night-time Experience" was formed in conjunction with consultation of residents (description in "Increased well-being of local citizens" above). In feedback from experiential walks and surveys, the overwhelming majority believed that the public lighting in the HUA must be as "green" as possible, consume as little energy as possible and be sustainable. Thus, solar panels and LEDs are seen as of paramount importance and the resulting strategy's conceptual designs and technical specifications emphasise minimising light pollution and adhering to sustainability principles. The Municipality of Braşov released a new regulation for advertising, publicity and display activities within the city, which is currently in the approval stage (not yet adopted in the Local Council). An educational component of this lighting study was also integrated into the Action 2 "City as a Classroom".

One Hub saved an estimated 384kg CO₂e by exercising control over their Hub's refurbishments, by specifying environmental credentials / approaches in the contracts for redeveloping the space. Slovenska Bistrica's Action 1 "Crouzet as a Hub" experimented with refurbishing an underused historical building as a co-working space, with a community / multipurpose room and a four-workstation office. The design concept for the co-working space was developed in collaboration with local stakeholders such as social enterprise KNOF which specialises in developing circular business models. As a result, the majority of the furniture in the co-working space was acquired through reuse or made from recycled materials. To the estimates of the Hub and their third party supplier, this saved a potential 384kg of greenhouse gas emissions (in CO₂e, or equivalent carbon dioxide), due to furniture saved from incineration by purchasing reused furniture and furniture made from recycled materials.

3.4. CULTURAL IMPACTS

Economic, environmental, social and cultural impacts are often intertwined. For example, social research into changes of a cohort's sense of place might naturally overlap with the cultural identity of the location. Thus, for the purposes of this section, cultural findings are rolled into the Economic, Environmental, Social Impact sections directly above.

See an example subset of the evaluation for Grand Angoulême's "Metropolitan Trail" directly below, regarding the discovery and innovation of cultural sites and values, and also including an environmental dimension. It is based on the Hub team's data, analysis and commentary. Fuller details and context can be found in their D5.3 Evaluation Report.

Example: Cultural discovery as an input to innovation
Grand Angoulême's "Metropolitan Trail" outputs

The entire trail has evolved through the various design stages:

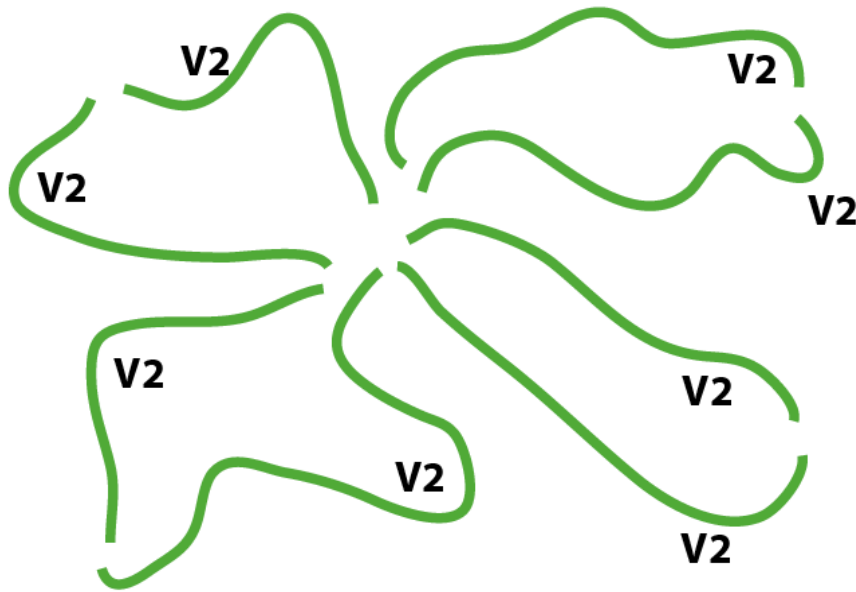


Figure GA1: early Draft Versions of the 8 segments of the trail that emerged during early co-design - rough outlines of walkable sections

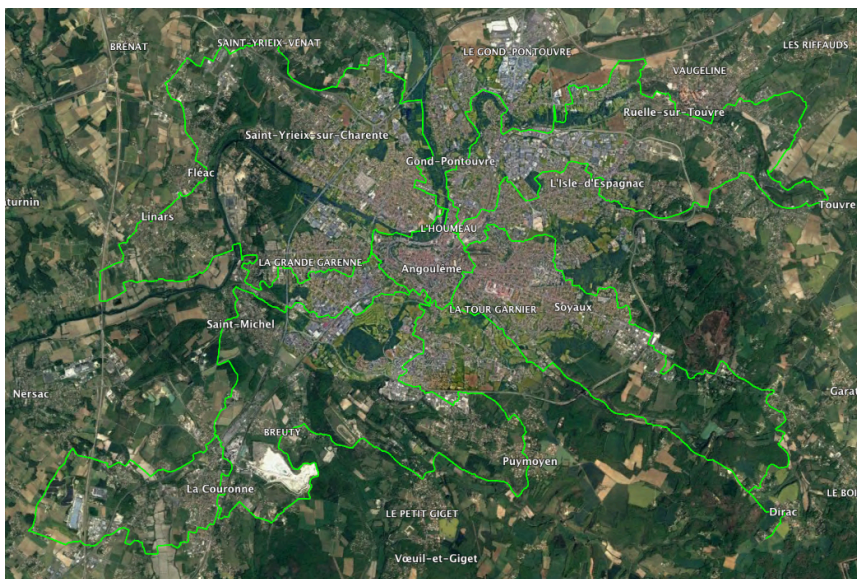


Figure GA2: First Versions of the 8 segments of the trail that emerged during early co-design - mapped to the local landscape

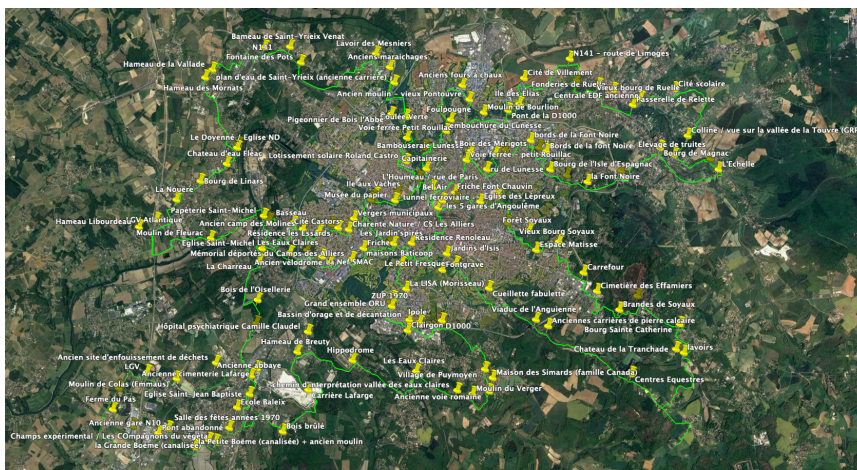


Figure GA3: Final Versions of the 8 trail segments that finalised from the co-design - mapped to the local landscape and populated with specific sites

Additional “co-benefit” outcomes:

Improved access to data on historical heritage for project partners

Approximately 150 sites have been identified for the Metropolitan Trail, with the place-history data grouped into 12 categories that create a new heritage portrait of Grand Angoulême:

Agricultural (5%)

e.g. Experimental field of the Compagnons du V: an old corn farm with **experiments in soil remediation**, bringing dead soil back to life through replanting trees and organic matter.

e.g. Anguienne equestrian centres: the Chatelard estate offers **horse boarding facilities** - this is also where actor Depardieu slept during the **filming** of Mammoth.

Housing history (10%)

e.g. Roland Castro solar development: in the 1970s, after the oil crisis, the government launched a competition for **solar houses**. This site is Roland Castro’s housing project : an innovative architecture but which has difficulty standing the test of time.

e.g. Basseau camps: **former workers’ camps** for Poudrierie workers, then prison camps and squatted barracks after World War 2.

Industrial (17%)

e.g. former port of Houmeau: created in the 13th century, it was the most **important commercial port** in the region and experienced significant development with the construction of the royal rope works of Rochefort and the system of barges (boats loaded with hemp and other goods). This is the industrious **district that Balzac speaks of** in Lost Illusions. With the arrival of the railway, the boatmen lobbied not to open a tunnel so that Houmeau remained a terminus with transfer of iron to the boats.

Place of memory (1%)

e.g. Alliers camps and Molines camps: **camps** that were used for Gypsies and Spaniards

Civil (13%)

e.g. comic strip fresco 1982: the **first painted wall in Angoulême**, which is now well-known for its frescos by local comic artists.

e.g. Oisellerie High School: this hospital, very modern for its time, was designed as an **autonomous community** with greenhouses and lands. The boarders, the insane, lived in community until death. The architecture is reminiscent of the cloister, the small chapel, today **open to all religions**.

Hydrography (10%)

e.g. La Vimière: one of the Houmeau rivers, sometimes hard to locate, piped throughout the Grand Font district since the construction of the Angoulême stations. Walkers in the neighbourhood can hear it under the manhole covers. During the bombing of the station, the neighbourhood was flooded because it had a “dyke” effect. There are entrances to this **underground canal**, undoubtedly with pretty masonry, **stone vaults** etc.

Infrastructure (8%)

e.g. Seguins footbridge: a fairly long **pedestrian bridge** from the beginning of the century. Picturesque view of the Touvre, the ducks and wildlife. It’s a postcard moment.

e.g. Relette footbridge: footbridge from the beginning of the century, planned since 1882 to facilitate the passage of employees of the Ruelle foundry and those of the **Veuze paper mill**. Work was completed in 1902 after delays due to financial and political problems.

Transport (6%)

e.g. Roman Road: **underground ruts** attest to the presence of a historic (secondary) Roman road which connected the village to the Eaux Claires valley, identified from ruts left by carts in the **Gallo-Roman era**.

e.g. the 5 stations of Angoulême: **important rail hubs**. Allied bombing during WW2 resulted in the abandonment of all stations except one remaining. These railway lines are found throughout the city, particularly rural lines.

Historic monument (5%)

e.g. Chateau de la Tranchade: a **Gallo-Roman site**, then castle, which protected one of the entrances for centuries: the Anguienne valley.

e.g. Effamiers Cemetery: a large cemetery behind Leroy Merlin’s stock. Small, very moving **Muslim square** with very simple and humble tombs below.

e.g. Saint-Michel Church: **octagonal church** with separate bell tower. Many modillions, Romanesque architecture.

Garden (6%)

e.g. Bourguine: an outdoor swimming pool from 1959 which has at times featured a beach volleyball court, 3-star campsite, youth hostel, Old Métis music concerts, the canoe kayak stadium. Considered a **wasteland for almost 20 years**, it was a bathing area for almost a century.

e.g. Frégeneuil: **formerly a gravel pit**, the pond has become a carp fishing spot and one of the most important local parks. 1922 photos indicate there were vegetable gardens here.

Natural (6%)

e.g. Fontaine des Pots: a place where **hemp was soaked** before being worked. Around it is a wood of chestnut and hazel thickets.

e.g. Mérigots woods: an **ancient wood** that was already on old maps: not the result of agricultural abandonment.

e.g. Bamboo Grove: a small, very dense bamboo forest with a stream meandering at the foot of the trees. **Artists come here** to supply themselves.

Vernacular (13%)

e.g. Pont de Saint-Antoine: an old Armenian, nicknamed the **Pirate of Angoulême**, dedicated himself to the construction of boats of all kinds. Also nicknamed the President of Houmeau, he opened an informal shipyard on the shore.

e.g. Old town / Maison des Simards: **Thousands of Canadians** descend from this family who emigrated to Canada in the 19th century. They return every year to find the house where their ancestors lived.

Table GA1: examples of the heritage and history encoded in the approximately 150 heritage sites and 12 categories

Outcome: Increased inclusion of cultural stories in the CCI sector's products

The Open Call resulted in projects embedding and leveraging the local cultural heritage. See Table GA2 below for a snapshot selection of artists' explanations of their Open Call projects:

Urban planning questions

"The series questions several subjects that have an important place in my thoughts as an urban planner and photographer-author: the **presence of water** and agriculture; developments in individual housing; industrial heritage and its appropriation; the **legacy of social housing** neighbourhoods."

Place-based stories

"Four **stories** that resonate with the four places identified during the Caravane, varying the angles of view: **futurology, heritage, scientific.**"

Evocative histories

"We collected the voices of former COFPA **factory workers**. We broadcast this sound creation in a felt cabin which evokes the presence of wool and felt in these old factories."

Place-based relationships

"I work in collaboration with a photographer, and we wanted to highlight the population who occupy the heritage places that certain metropolitan trails cross. We wanted to ask them questions about the **relationship they have with the place they occupy**. We chose these places because they all had a link with the garden."

Fictional futures

"The 'Dismantling!' is an installation covering the **Lafarge factory** and its territory. Combining photographs and sound stories, the piece projects us into a **fictional future** where the place has become a park on the themes of the old cement factory and destruction."

Dance performance ritual

"Creation of a walk/**dance performance ritual** around building 87 of the **foundry** in Ruelle-sur-Touvre."

Exploration notebook

"With the perspective of a **fictional archaeologist** who knows nothing about our world, I produced around twenty pages of an exploration notebook mixing **observation drawings** and archaeological extrapolation."

Comic fiction

"A **science fiction comic book** set in a world where only a few human groups remained after the fall of an extraterrestrial meteorite on the **town hall**. In this world, artists are forced to rebel to save their works, considered a raw material for the manufacture of electricity."

Table GA2: a selection of artists' explanations of their Open Call projects (first Open Call)

*"[I learned] to **link fiction with the territory** and to situate a plot in a heritage context."*

Comic author

*"[I learned about] **mixing fiction and historical data.**"*

Photographer and sound production

Additional “co-benefit” outcomes:

Increased inclusion of cultural stories in the CCI sector's products

Caravane members offered numerous proposals for future culturally-inspired innovation, from escape games to frescos to drone videos and more. Whilst it is too early for any of these to have been developed further, they illustrate ideation generated by networking and points of interest on the Caravane trail.

Drawing

- Sketchbook to mark the route and unusual places between the city of camps, that of edibles and the two Queens

Participatory

- A major investigative work on the Champ de Maneuver with residents, murals, playful diversions, short films
- An idea focused on the water cycle in the environment: couple it with imagination, a civilization more in harmony with the waterways... secret passages, water tunnels, hidden rooms...

Photography

- A photo series on landscapes, how the places were previously

Performance

- A choreographic creation to take the time to listen and look differently, resonate with the space, enter into a relationship with ancestors (rebuild the link)
- Sound or theatrical hike on local history

Sound

- Sound walks - projection towards a desirable future reconnecting with the past activities of these spaces.
- A sound tour - allowing the walker to have an interpretation of these elements of common heritage
- In situ podcast, activated via a flashcode, present at each point of interest. The character of the production could be historical or purely artistic

Expos

- Exhibition on the places and their past (scenes of life)
- Multimedia exhibitions in the “Baux de Provence” style quarries

Books

- A children's story about a pike who lost his teeth
- A historical fresco on the rebirth of activities that have now disappeared
- A thriller in the genre of Jean-Claude Izzo in Marseille
- A book of stories that mixes historical facts and legends

Comics

- An eco-fiction comic book around a river
- A sci-fi ballad where nature has invaded the places and humans wander local places in search of resources (the dovecote, lake tavern, building of the last ride, anti-nuclear shelter, wash house etc)
- A prospective sci-fi comic with a botanical dimension
- A sci-fi comic in which buried places are rediscovered and exploited differently

Plastic art

- Still life based on elements found on a site, wild plants
- An interactive and collaborative map around industrial architectural and cultural heritage.

Construction

- A floating structure on the Charente providing a viewpoint / resting point. With a geomagnetic study and social design
- Fictional constructions (huts but not habitable) behind the crossroads
- Rehabilitation of the Lafarge site
- Work on public space in the solar house district

Movies

- Documentary on the Lafarge career
- Solarpunk animated film about the anticipation of the semi-wild or permaculture reappropriation of abandoned places, such as quarry or railway wastelands
- A "bird's eye" video by drone through the territory, through the eyes of an animal (bird or land)
- Historical or fictional films to watch on your phone
- A documentary about local personalities, residents
- A video about birds and how they inhabit the territory
- A music video filmed in the dovecote

Games

- A video game that would tell love stories among a group of hiking researchers
- An escape game to mobilise young people

Table GA3: a selection of proposals for heritage-inspired innovation from the Caravane participants (N.B. ideation stage only)

3.5. ADDITIONALITY

Assessments for additionality of HUB-IN (the extent to which it makes a net difference, were included into assessment designs of the individual actions. The principles of relevance and proportionality (cost-effectiveness etc) were applied in order to filter out data collection that was not appropriate to the scale of the action, the timescales for expected results, or the nuances within the HUA. Each city and Action has nuances that apply, and these are contained in their D5.3 Evaluation Reports. Key factors include:¹⁴

Leakage: when outputs benefit those outside the intervention's target area or group. In general terms , expected to be low due to the intervention designs because - using Accelerators as an example - the Action has a dedicated approval process to select only CCI entrepreneurs in the HUA and a training offering precisely focussed on embedding heritage into products and services. The same for locations and activity formats for co-created trails, workshops, adaptive use of buildings etc.

Substitution: when a firm substitutes one activity for a similar one (for a hypothetical example, if an organisation in a government-sponsored employment programme recruits a jobless person to gain the subsidies but then compensates by firing another employee - there is no net change in employment) to take advantage of public sector assistance. In general terms, expected to be low because - using Accelerators as an example - the entrepreneurial training should result in innovators able to develop skills in heritage-based innovation, and not at the expense of becoming less skilled in other business processes. In cases such as Accelerators where results were mature enough to enable (some) modelling, a conservative position is explored for there being some substitution, and using values from literature reviews of evaluation methodologies referenced in D5.1 "Common Impact Assessment Framework". Where possible and appropriate in the Actions it was tracked, sometimes with Hub team knowledge used as more informed inputs, as logged in the D5.3 Evaluation Reports.

Displacement: when an intervention takes resources from other existing firms or local organisations. Displacement questions were included in Accelerator pre- and post- surveys, although innovators did not always feel they knew enough to answer (for example in some evaluation methods market displacement is measured through a proxy of how much turnover would be taken up by competitors in the event of the SME closing, and innovators did not all feel able to answer this question knowledgeably). To some extent, as the focus of HUB-IN is on bringing benefits into the HUA, rather than producing net economic or social gains for the wider nation, displacement was sometimes seen as not so relevant. Where possible it was tracked in Accelerator surveys as well as event surveys and so on, sometimes with Hub team knowledge used as more informed inputs, as logged in the D5.3 Evaluation Reports.

Deadweight: when (part of) the outcomes that would likely have happened anyway from other support programmes or trends affecting the same target area or beneficiaries. HUB-IN's co-creation processes (see the HUB-IN Framework etc) were designed specifically to target gaps - and therefore to minimise the risk of duplicating efforts that are already being addressed by other programmes, investments or trends in the HUA. Some control over this is within Hub teams remit when designing their actions in full consultation with stakeholders. New projects can always launch however, and contexts in HUAs may change - for this reason the Hubs monitored existing and emerging projects in the Hub, and identified any areas of overlap or, more positively, potential synergies. No significant duplications were found. Several synergies were found - for example, Genoa's Actions around events, pop-ups, temporary shops etc were designed to be the cultural human counterpart to hard physical regeneration programmes ("Caruggi"), and they worked in tandem to leverage locations that could benefit from both projects.

Innovators and public attendees to events generally reported an overall additionality of HUB-IN, with some variances in responses. For example,

- 83% of Belfast's Challenge Call innovators reported "we would not have obtained the support with a different provider" (in contrast to receiving the support but of a lower quality, at a late time or with a different provider - all six entrepreneurs responding).
- In Grand Angoulême's Metropolitan Trail pre-launch walks, 97% of respondents discovered at least "some", "many" or "all" places for the first time, and of those 7% of them encountered all the sites for

¹⁴https://assets.publishing.service.gov.uk/media/5a7568e5e5274a467f7e44e0/Additionality_Guide_0.pdf

the very first time (30 respondents from the public).

- In Nicosia's Heritage Walks, respondents agree that the Walks have potential for attracting and stimulating visits to the HUA: 3 out of every 4 walkers would not have visited the HUA if the walk had not been happening. Only 25% would have still visited the HUA anyway, 10% would have visited elsewhere in Nicosia (i.e. displacing visits from other parts of the city), 19% would have visited elsewhere in Cyprus, and most of the rest (43%) would have simply stayed at home. The sample size was 99 out of over 1,000 registered walkers.
- The four Innovators in Slovenska Bistrica's "Crouzet Accelerator" were split between views that the projects would never have developed without HUB-IN's support, or would simply have taken longer, but also had strong positive feedback on the mentoring provided.
- In Utrecht's "Talent Development", focus groups revealed mostly positive views that the support could not have been received without HUB-IN, although in one case also that this depends on the types of projects as to whether they can actually access finance.
- Other Hub actions were by their nature not happening elsewhere, as they were designed by cross-sector co-creation to fill gaps, such as Braşov's "Transforming the Public Realm", summer schools and lighting plans, and Lisbon's repurposing of unused heritage space in "Heritage Pop-Up" and other actions. Genoa's Actions, for example, were designed to be the missing cultural counterpart to physical regeneration programmes (e.g. the Caruggi redevelopment programme).

*"Without the Challenge Fund's support, **we would not have considered heritage** as a potential vertical for the company. This is something we are **now factoring into business development** and we have been speaking to other museum organisations as a result."*

**Entrepreneur,
Challenge Call, Belfast**

*"I don't think I would have done this right away. It would be a matter of **waiting for financing** that makes that possible. Those aren't things I can do on my own, so I might have realised that plan at some point."*

**Entrepreneur,
Talent Development, Utrecht**

3.6. FUTURE IMPACTS: CAN HUBS GENERATE A FLYWHEEL EFFECT

The consortium consensus is that HUB-IN's intended impacts require longer-term horizons and resources to materialise, with the exception of those early indicative results in the Economic, Environmental and Social Impact sections above. However, discussion also explored the potential for the Hubs to generate a “flywheel effect”, whereby small successes in one area help to generate small successes in another area, which combine to generate successes in another area and so on, perhaps in a non-linear way, eventually attracting resources into the HUA to enable the Hub's continuation. Using an example from Belfast that aligns with HUB-IN Entrepreneurial Ecosystem elements:

Belfast's Action 1 “Waterfront Promenade Framework” sets out a vision for development in line with heritage, social and environmental values, which enabled...

<p>→ ...partners to commit to approximately €70,000 of matched funding (£50,000) from public, private and voluntary organisations, towards the Framework, which once developed then enabled... <i>(Entrepreneurial Ecosystem element: Finance)</i></p> <p>→ ...other projects that are local to the HUA and aligned with HUB-IN to be successful in attracting funding, with approximately €70,000 identified as partially due to the HUB-IN Actions building evidence and momentum, which may enable next... <i>(Finance, Networks)</i></p> <p>→ ...etc</p>	<p>→ ...local organisations in the Action 2 “Environmental Audit” to see a visible future for the waterfront and align behind it, which then enabled... <i>(Entrepreneurial Culture)</i></p> <p>→ ...the organisations to agree to a joint, green subcommittee to share information and resources, which then resulted in... <i>(Entrepreneurial Culture, Leadership, Knowledge)</i></p> <p>→ ...the organisations selecting the target of joint progression towards an official sustainability certification aligned with Global Sustainable Tourism Council (GSTC), which may enable next... <i>(Formal Institutions)</i></p> <p>→ ...etc</p>	<p>→ ...Accelerator entrepreneurs in the “Challenge Call” to align their innovations with the heritage and social values expressed in the Framework's vision, which then enabled... <i>(Entrepreneurial Culture)</i></p> <p>→ ...the entrepreneurs to build evidence and experience in the Challenge Call on heritage-based innovation aligned to the Framework's place goals, which then enabled... <i>(Knowledge)</i></p> <p>→ ...over 600 users to engage with heritage innovations, including the public, learning about local history and culture, which then supported... <i>(Urban Culture, Heritage, Knowledge)</i></p> <p>→ ...the entrepreneurs' ability to apply for funding by using the evidence and public experiences from the Challenge Call, which then enabled... <i>(Entrepreneurial Culture)</i></p> <p>→ ...the entrepreneurs to leverage heritage as an asset up to approx. €250,000 (£210,000) of funding identified as fully or partially attributable to the Hub's support, which may enable next... <i>(Finance)</i></p> <p>→ ...etc</p>
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And using an example from Utrecht:

Utrecht's Action 1 "Supporting the Hub" set out a governance model and plans to professionalise the Hub, which then enabled...		
<p>→ ...the BKC Hub to push for positive outcomes in enhanced communication channels and formalised goals, which then enabled... <i>(Knowledge, Leadership)</i></p> <p>→ ... them to plan structured interventions in the HUA that could be resourced, with targets, scoping and public communications, which then enabled... <i>(Knowledge, Leadership, Entrepreneurial Culture)</i></p> <p>→ ...steps to be taken for greening, and traffic safety in the area, aiming to significantly improve the overall experience for businesses and their visitors and customers. Specifically, plans include planting extra trees and shrubs and creating green strips / wadis on Gietijzerstraat and Walserijstraat to collect rainwater, which may enable next... <i>(Urban Culture, Physical Infrastructure)</i></p>	<p>→ ... other creative Hubs to scale and / or operate more effectively by applying learnings from the governance template (an estimate of 25 organisations and creative workers impacted by the template and toolkit), which may enable next... <i>(Knowledge, Leadership, Entrepreneurial Culture)</i></p> <p>→ ...etc</p>	<p>→ ... the BKC Hub to gain commitments for €642,000 of funding towards its future Actions in the HUA, consisting of: <i>(Finance)</i></p> <ul style="list-style-type: none"> • €164,000 annual contribution committed from the Entrepreneurs Fund Utrecht over the next 3 years; and • €50,000 annual contribution committed from the HUA's owners' collective over the next 3 years <p>...which may enable next...</p> <p>→ ...etc</p>

Figure 1: indicative and high level view of the "flywheel effect" / virtuous circle effect raised regarding the results of Belfast's and Utrecht's Hubs

Other examples across the Hubs include:

- In Braşov: a complementary project of approx €14,000 gained funding and attributed this partially to HUB-IN's evidence and momentum (KunSTadt, offering multidisciplinary events in the HUA public spaces to create hubs of art and creativity involving local artists, the community and companies).
- In Genoa, one of the implemented projects has decided to become a start-up (Fair to Share). They are planning to hire two people and capitalise the network built during the project to open several pop-up stores each time in a different place, some in the HUA.

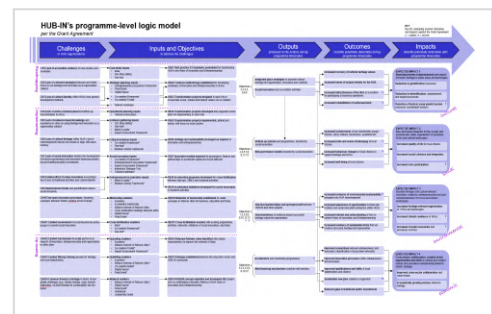
These types of effects may ideally build over time, contributing to the area's wider innovation readiness such as is tracked in Regional Innovation Scoreboards (Appendix 5.5), and strengthening the foundations of the entrepreneurial ecosystem elements that form the ingredients of a HUB-IN place.

4. PROGRESS TOWARDS THE PROGRAMME'S THEORY OF CHANGE

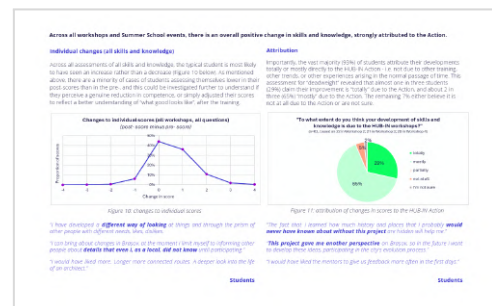
Any early indications relating to standard economic impact assessment are described in Section 3 "Economic, Environmental and Social Impacts" above. However, as referenced above, the general consensus in consortium evaluation sessions is that HUB-IN's intended impacts require longer-term horizons and additional resources to replicate and scale. As an interim evaluation, and borrowing from reflexive methodologies, this section evaluates the interim findings to understand progress against the programme's Theory of Change, based on the Hubs' evidence findings and consortium working sessions. This is thus an evidence base of findings against the programme's overarching question: "To what extent can Hubs of innovation and entrepreneurship promote the transformation and regeneration of Historic Urban Areas, while preserving the unique identity, cultural and social values."

The process is based on:

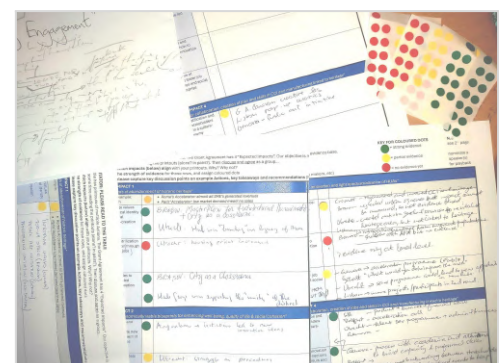
1. *programme-level Theory of Change*
As the Actions were refined through their planning stages, so too did the understanding of the programme's possible change pathways, and so some outcomes have been added to the logic model (see Figure 2 below). The four Expected Impacts in the Grant Agreement generally each have a predominant Economic, Social, Environmental or Cultural dimension, and so are labelled accordingly. These are indicative guides rather than rigidly constrictive labels - e.g. "Expected Impact 3" aligns to Environmental but also contains some other impacts, such as scaling Hubs.



2. *city-level reporting*
As Actions implemented, cities collected and assessed their pre- (baseline), during and post- data. As impacts were not always expected to be detectable during project timelines, this included operational results and process evaluations as well as impact evaluations. Part of the reports aimed to encourage "reflexive monitoring" processes, whereby Hub discussion could uncover learnings and adaptive actions.



3. *consortium evaluation sessions*
Consortium Meetings featured sessions where cities and Work Packages could hold interactive discussions and reflections on the findings to date. In the most recent, city and Work Package teams reviewed the assembled city-level findings and participated in a cross-city scoring exercise on the maturity of results against the programme-level logic model. For simplicity, scores use a visual system of red-amber-green to denote results of "none yet", "partial", "moderate" or "strong". N.B. a scoring of "none yet" simply indicates that the timelines, scale or complexity of the challenge mean that there is not a strong impact detected by the Hubs to-date (e.g. gentrification can be a multi-year phenomenon). The scores are by nature subjective, as the value lies in the scoring discussions triggering reflections and learnings. As there are 29 Actions, only a subset of brief summaries are given - see the cities' D5.3 Evaluation Reports for more.



See Figure 2 below for the programme's logic model, and Figure 3 below for the programme's logic model as scored red-amber-green for maturity of results in the short-term.

HUB-IN's programme-level logic model

per the Grant Agreement

KEY
Key for comparing evolved Outcomes and Impacts against the Grant Agreement
a = added, m = moved

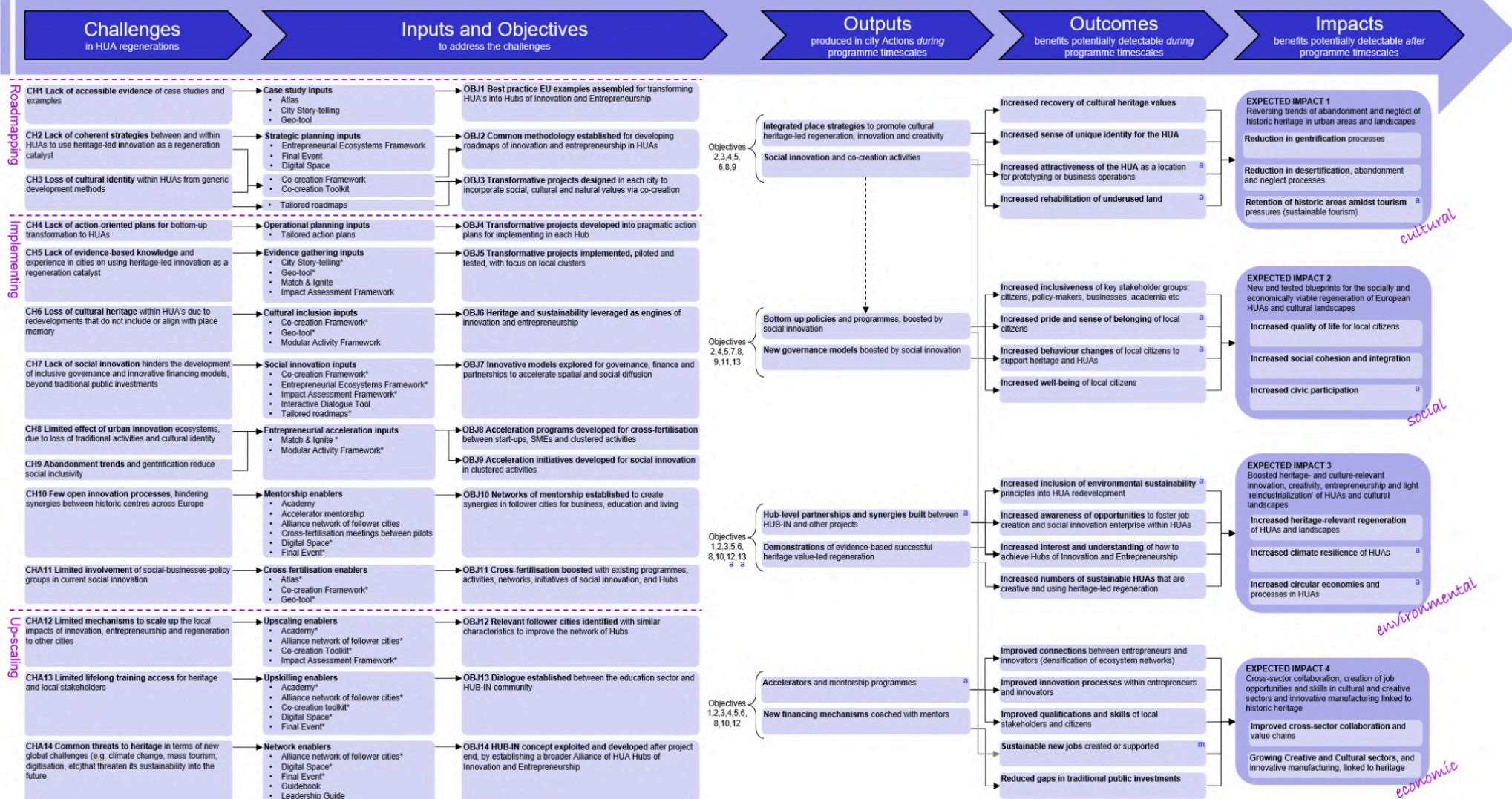


Figure 2: programme logic model based on the Grant Agreement driving towards "4 Expected Impacts". City logic models align to these impacts at Action-level.

The consortium scoring recognised pockets of moderate results, whilst recognising challenges in each and that the longer-term impacts are a more complex journey:

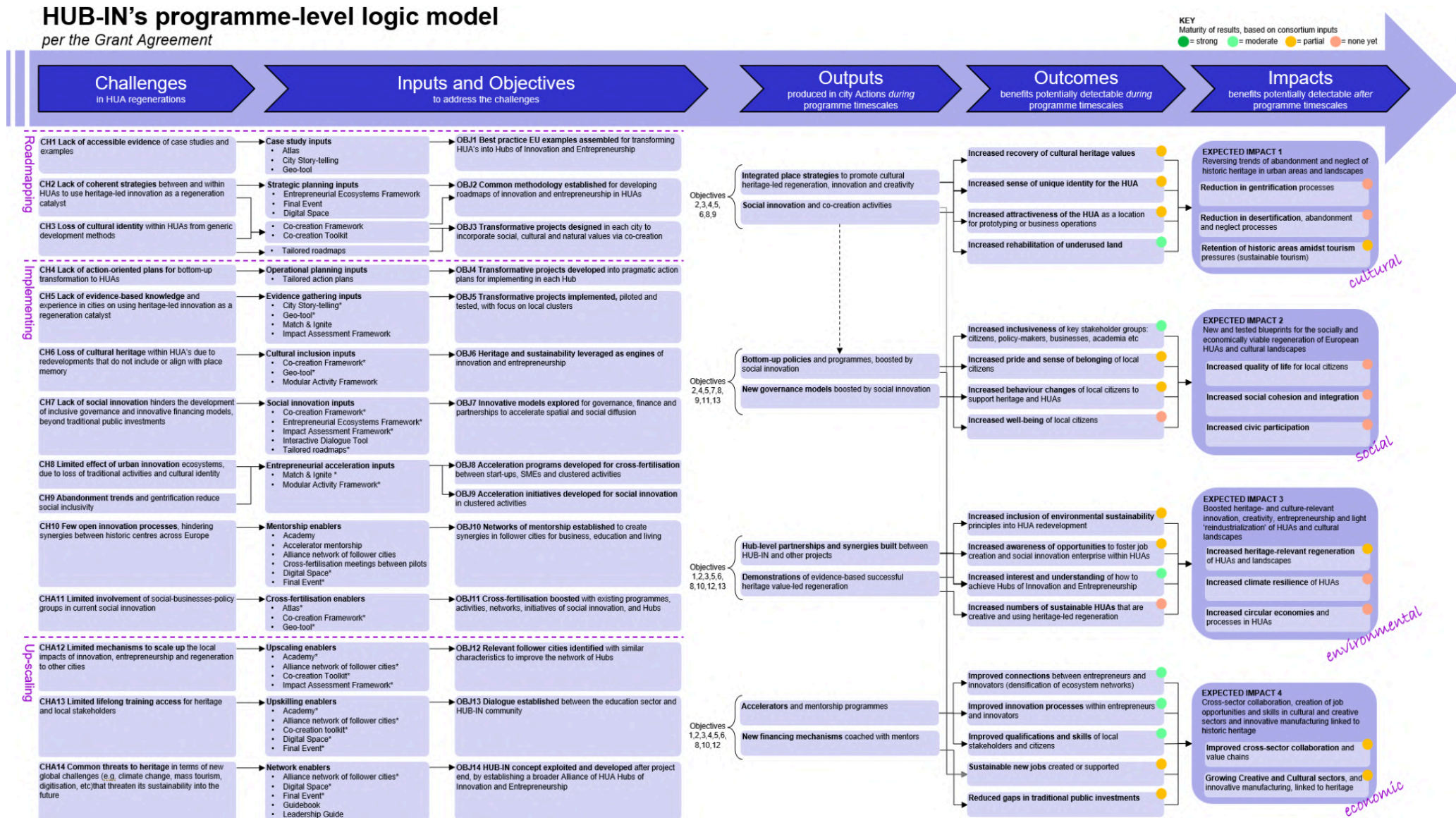


Figure 3: programme logic model, with additional consortium scoring on progress towards the long-term impacts.

4.1. EXPECTED IMPACT 1 (CULTURAL: REVERSE NEGLECT OF HERITAGE AREAS)

“Reversing trends of abandonment and neglect of historic heritage in urban areas and landscapes”

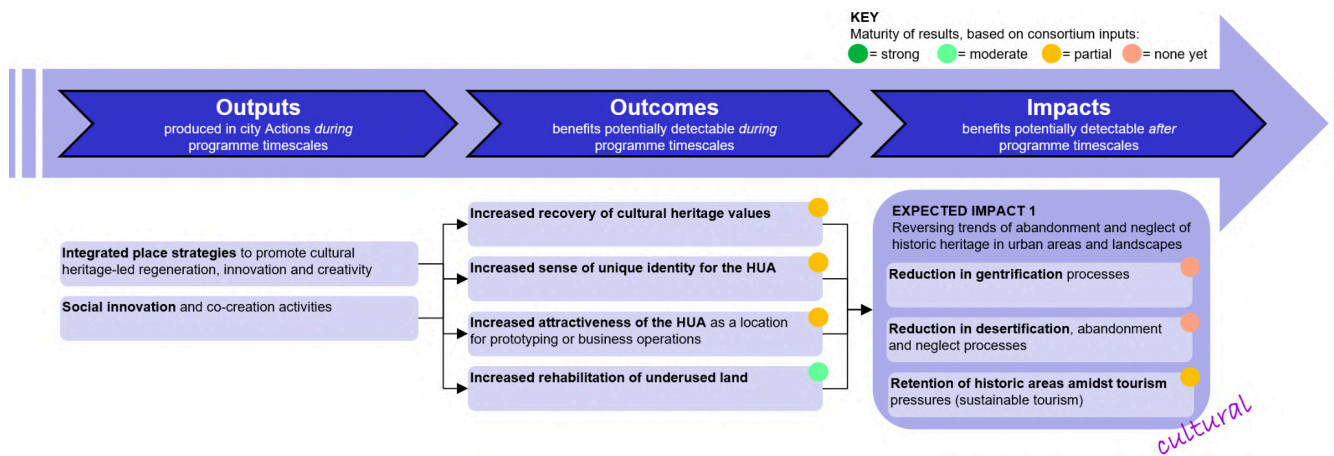


Figure 4: “Expected Impact 1” and consortium scores for results in its component outcomes and impacts

Summary evaluation and learnings

Outcomes

Benefits potentially detectable *during* programme timescales

Increased recovery of cultural heritage values

Discovery and recovery of cultural heritage values was widely embedded into Action outputs.

Across the Hubs, entrepreneurs and coc-reators of wider actions uncovered tangible and intangible heritage and, with developed ideations, solutions and prototypes with varying levels of maturity. Some have had users report increased cultural awareness, some have commercialised and some are still very nascent - indicative explorations. For example: 622 user testers in maritime **Belfast** experienced the development of “voyaging to the past” prototypes for Augmented Reality inside historic naval ship HMS Caroline; encountering game engine technology to have real-time conversations with historical characters; and digital sculptures and volumetric films of historic dock-worker life; and others. The local nature of the public trials and principles of cost-effectiveness screened out opportunities for a 3rd party full-city survey, but users were questioned via goodwill surveys: 88%, 94% and 94% respectively Agreed or Strongly Agreed their experience had *raised awareness* of the role of heritage, of different historical figures and local history (N.B. small sample of 16). **Braşov**'s Actions 1 and 2 “Transforming the Public Realm” and “City as a Classroom” addressed the physical realm of public squares and hidden heritage (see “Increased rehabilitation of underused land” for results, not duplicated here).

Genoa's Action 4 “Developing and Running an Experimental Call for Innovators” gathered evidence of allowing artisans to display wares in spaces of historic importance (25 artisans in a Rolli palace). Over 650 people visited the previously inaccessible and preserved private buildings during the 11 opening days, with feedback identifying new visitors with increased interest in the HUA. Likewise, Genoa's Action 2 “Public Art”, displayed digitised paintings of 16 sacred niches that adorn many heritage buildings yet are becoming lost to visibility because of deterioration. These were installed in a municipality-owned public office located at the heart of the HUA and providing day-to-day services to local inhabitants. See “Increased rehabilitation of underused land” for some indicative outcomes in how the heritage outputs affected *cultural awareness*.

Mapping the local historical heritage in **Grand Angoulême** identified over 150 sites of historical and environmental importance for later design of a Metropolitan Trail, including underground canals, churches, former WW2 prison camps and barracks in a difficult history, and more. Action 3's “Caravane Creative Lab” then sourced ideations from creatives and other participants on products or services that could leverage the mapped heritage sites on the trail. Whilst it is too early for any to have been produced or generate revenues or jobs, proposals include 34 ideations that may feed into the local creative sectors future

projects, including theatrical hikes on local history, escape games to mobilise young people, “bird’s eye” video by drone to communicate how the territory is experienced through the eyes of the local wildlife, etc.

Traditional Lisbon crafts were brought to the public surface in **Lisbon**'s Action 3 “Heritage Pop-Up”, by opening to the public lectures on the history of local ceramics, and practical workshops where attendees could learn about 16th-18th centuries’ earthenware, and materials and techniques from other time periods, and get their hands dirty to create their own works of art, guided by local master ceramists. Exhibitions of ceramic pieces showcased a diversity of styles, techniques, and artistic expressions, with visitors to the event able to purchase the author's ceramics. Outputs included 250 visitors, viewing 20 ceramists' work, four workshops and four talks available, one exploratory trail of local ceramics routes, 14 hours of sales and an exhibition of 12 artist's pieces. About two out of every three visitor respondents to a survey stated they'd tell friends and family about what they have experienced (69%, assisting with dissemination and knowledge transfer), that Pop-Up demonstrated the diversity and quality of the ceramics from Colina do Castelo (64%) and that they had a desire stimulated to get in touch with ceramics (60%). Sample size of 42 respondents.

*“I really enjoyed the Peddy paper because **I discovered things in Mouraria that I didn't know about**, they are all **spectacular**... I discovered that there is a cluster of **tile and ceramics** shops... very nice!”*

Participant in Lisbon’s Pop Up activities

Ten co-designed Heritage Walks in **Nicosia** introduced over 1,000 walkers (tracked by registrations) to its Middle Ages transformations and royalty; its dynamics between religious power and wealth; its local theatre; and its evolving multicultural future amidst a conflict-fuelled past. Pre-walk questionnaires to all registered walkers validated local perceptions of insufficient knowledge about Nicosia's history and culture (~60%), only sporadic visitations to the HUA (~60% visit the area a few times per year), and barriers to HUA discovery due to obstacles (~40% walk in the HUA a few times per year largely because of constraints such as narrow pavements and the heatwaves). Whilst the Walks can not address physical infrastructure on their own, a majority (86%) of post-Walk respondents Agreed or Strongly Agreed that the Walks had raised awareness of local heritage (on a scale of 1-5, 99 post-walk respondents). It is too early for annual studies to monitor changes in HUA visits, but 3 out of 4 respondents (75%) cited plans to “tell family and friends about it” as a behaviour change the Walks had induced, supporting knowledge transfer. Over half, (54%), planned to participate in more local initiatives in the HUA, supporting further discovery. Only 2% responded having no behaviours inspired by the Walks.

*“I got to know **places I didn't even know existed**. I will go again with family / friends.”*

Heritage Walk walkers

In **Slovenska Bistrica**'s Action 2 “Crouzet Accelerator”, innovators offered jewellery workshops based on traditional aluminium metalworking techniques passed down from generation to generation. Materials come from a local factory (2kg/year), contributing in a small way to the local ecosystem. Others created clay replicas of the facades of Slovenska Bistrica's most significant historical houses, or illustrations on the essence of local cultural identity (Bistriški Castle, Jakčev Mlin, the Roman Quarry in Bistriški Vintgar, white villas on Pohorje, the White Castle Lady, Vodovnik and so on). The Crouzet itself is a historical building, refurbished for modern coworking (four workspaces) and community events. The Accelerator held a Demo Day there where approximately 30-40 visitors attended - 64% encountering the heritage building for the first time, and 78% citing their awareness of local cultural heritage had increased either “a lot” or “extremely” (out of a 1-5 scale, 22 respondents).

Challenges persist regarding confidence on longevity of the recovery of cultural values, and the depth to which they will be embedded in the medium- or long-term. For example, tour guides in Nicosia were positive about recreating the Walks with their new networks, yet clear that finance is a major key barrier (“we contributed to a small degree of impetus. The rest is a matter of financial investment.”). Generally across cities, the participating innovators are in nascent stages of prototyping and maturing their own processes, and it is too early to have generated revenues or stable jobs directly from the inclusion of

cultural heritage, or for changes in the wider population to have resulted. This could be tracked in follow-up assessments within each Hub, using the monitoring tools.

Consortium's scoring: whilst there is evidence of outputs linking cultural heritage values into innovated products (and positive results amongst residents and visitors who interact with them in terms of new knowledge and awareness), from an impact perspective it is too early and small scale to detect significant downstream change in cultural awareness in overall populations, or sector-wide uptake of heritage that constitute "recovery" of heritage values. Thus, a score of "partial" results.

Recommendation (low-cost nudges can uncover the desire of hidden knowledge-holders to share): *feedback on why Heritage Walk co-designers were demotivated to participate including making contacts, knowing more history, and pride in displaying hidden history. However, they feared the benefits of one-off Action would soon disperse. Keeping the Walks "alive" was seen as crucial. Given municipal budget constraints, the guides recommended considering the role of light-touch nudges that unlock dormant energy and inspiration: announce competitions or host debates to solve problems; differentiate from mostly-commercial offerings and shopping malls to attract visitors all year (e.g. concerts, treasure hunts); or partner with future infrastructure development projects to provide a cultural counterpart to their physical regenerations.*

Increased sense of unique identity for the HUA

Related to the above, the uncoverings of historical heritage aim to support a local identity based on the discovery of its crafts, place, traditions and built environment, and envisioning how those can have deeper meanings for individuals and a common future in the HUA.

The Hubs have some early starting evidence that unique historical sites can attract participation from artisans and visitors. For example, **Slovenska Bistrica's** refurbishment of the historical Crouzet building as a co-working and community space (referenced above, not duplicated here). **Braşov's** Action 1 "Transforming the Public Realm" also worked on the link between physical realm and identity, by reclaiming 938m² of physical space in public squares from illegal occupation by tourist-driven restaurants and cafés, and opened usage of the historic areas to residents through student-created urban furniture (see "Increased rehabilitation of underused land" below).

Genoa's formerly private and inaccessible private historic Rolli building was tested as a site of temporary pop-ups for 25 artisans, and a local municipality public office installed with digitised paintings of 16 sacred niches (described above). A general community survey of 353 residents revealed that a majority 97% of local residents agree "somewhat" or "a lot" that the HUA already has its own specific identity (historic sites, authenticity and beauty etc) yet a majority disagree that it is a nice place to live (57%). Whilst the innate history and culture of the HUA bring uniqueness to its identity, the scores suggest that further interventions are needed to embed this identity into a positive lived reality of residents over the longer-term.

*"The **history of an old place can be continued even today**, it does not end after it was built."*

Student, City as a Classroom, Braşov

Some of this will require time to unfold, as the place-based strategies get more fully underway.

For example, Belfast's Action 1 "Waterfront Promenade Framework" sets out a future structure for the development of the Maritime Mile in light of its shipbuilding past. Ecosystem stakeholders reported perceiving the revival of the river heritage as a future asset to regeneration, and its co-created design specifically recognises the value of local needs and talent through its specific objectives centred around social value for local communities, such as improving employment opportunities for deprived communities (Sailortown, Short Strand, etc) to flourish, and preserving maritime heritage for future generations.

*"It's great to see us starting to **face towards the river again rather than turning our back on it** and to help them to regenerate the communities and the*

*rich heritage that exists right along the River Lagan. It's a great step in the right direction as we **look to the future.**"*

Councillor, Belfast City Council

Challenges persist regarding the extent to which short-term interventions can affect identity, which is deeply personal to individuals and with many factors at play. Many HUA's by their nature have a unique identity from their heritage, but further interventions are needed to continue its regeneration over the medium and longer-term.

Consortium's scoring: early evidence of uncovering heritage-based identity, but time and scale are important to reaching a population's sense of identity. Thus, a score of "partial" results.

Recommendation (align to existing sense of identity to encourage community ownership): *Braşov reports that people in HUA are intrigued by the pretext objects installed in the squares and the lives of the objects. Each square has its caretakers, who act as guardians for these objects. Recently, an anonymous individual repaired the Snake Bank furniture, showcasing the community's dedication to preserving these objects. Another touching example is the collective effort on social media to locate the Wheelbarrow Bench after it was relocated. These objects bring people together, as they are not only utilised but also serve as pretexts for shared stories and captured memories.*

Increased attractiveness of the HUA as a location for prototyping or business operations

All Hubs used the HUAs as a location for Accelerator prototyping or displays of open calls, in varying ways. In **Belfast**, 13 applications were made of which six were successful. Each had a formal partner but there were 17 organisations involved in total that gained experience of deployment in the HUA. **Braşov's** Action 2 "City as a Classroom" placed 41 students in immersive learning to (see "Increased rehabilitation of underused land"). In addition to designing and installing public furniture, students contributed to analyses and interviews that now make up the Old Centre's first digital database: 24 moving map questionnaires on high school student's favourite pastimes and routes in the Old Town area; 4 analyses of pedestrian movement in four Old Town locations and 24 interviews with locals in four locations in the Old Town. The target set (3-5 pieces) was not only met but exceeded, with the installation of 11 "pretext objects" across four intervention squares, showcasing a diverse range of creative designs.

*"This project gave me another perspective on Braşov, so in the future I want to develop these ideas, **participating in the city's evolution process.**"*

Student, City as a Classroom

Genoa's "Fair to share" enabled 25 artisans to participate in pop-ups in the HUA, getting to exchange learnings and knowledge, establishing new relationships and strengthening their networks. "Da Banchi a Pré" project ("From the Piazza to the Street") was held with the aim of attracting citizens in the HUA by offering entertainment, experimentation and an unconventional shopping experience. A "Passages of Light" project aimed to improve the HUA's famous Via Del Campo through arts (lights, music, images and words), managed by a social cooperative. In the Open Call of **Grand Angoulême**, 100% of the supported artists say they have learned new things about heritage, 88% say they now considered heritage as a valid resource for setting up projects in the future (a core aim of the Hub), about 2 out of 3 say they developed new skills to support this in terms of field approaches (63%), and almost all of them followed the trail independently, in addition to the Caravanes. It is therefore a tool that they have managed to use independently. 14 people were selected as part of the first Open Call for projects that had finished by the time of reporting. Of the 14, eight provided responses.

The de-centralised incubator in **Lisbon's** "De-incubator" saw nine projects experimenting with products and services from food festivals to physical Social Mosaic walls to digital repositories for heritage information and beyond. Post-surveys, the top-scoring benefit was for "networking that leads to knowledge exchange",

followed by “new understanding of our end users” and “access to new locations for projects or prototypes”. **Slovenska Bistrica**'s Action 2 “Crouzet Accelerator”, took place in the Crouzet, itself a historical building, refurbished for modern coworking (four workspaces) and community events. Supported entrepreneurs identified the top 3 benefits: visibility of their products, new ways working (specifically co-creating with local stakeholders) and opportunities for networking. Access to HUA talent (in terms of recruitment) was least important for them. **Utrecht**'s Actions took place with BKC, a creative collective entirely focussed in the HUA, and other local artists in the area, thus building on the area's existing attractiveness.

*“The project is not complete, but is more about **raising public awareness** of the common urban space, which is often overlooked in smaller cities. In this respect, the project was successful, and **I am sure that the fruits will be seen in the future.**”*

Architect, Crouzator

Innovators saw HUAs as good places to learn and test, but not yet as places to relocate to. In **Lisbon**'s “De-incubator”, most of the 9 projects were “not sure” about locating their main business operations in the Colina do Castelo. It is understood that the projects by their nature don't need to have a physical space in the HUA, so their headquarters could be elsewhere where the rents are more affordable, and they could be implemented in other areas of the city. **Belfast**'s entrepreneurs hold positive attitudes that the HUA is an attractive place to work and test prototypes, and that in general it has levels of footfall for testing / generating revenue. However, between pre- and post- surveys, some reduced their views that the Maritime Mile is a good space to test prototypes and partner with other organisations, Contributing to these scores are challenges that one or two projects found it difficult to get access to locations immediately - there was some work involved to secure permissions from land owners, even with the HUB-IN team support. Natural conditions play a role too: one entrepreneur in particular had numerous locations selected but due to flooding barrier work couldn't access some of them and had to mobilise for new locations and new stakeholders at last minute. Consultations revealed that some of their previously high scores may be due to excitement in the pre- survey, that were then given a more reflective answer after the entrepreneurs had learned challenges involved in prototyping in reality. Whilst the entrepreneurs had differing experiences, in none of the key attitudes do any entrepreneurs disagree with or strongly disagree with the attitude that the HUA is a good place to test prototypes or an attractive place to work.

*“The various agencies who own/are responsible for different pieces of land along Maritime Mile were extremely difficult to navigate. Due to the **challenges of redesigning the project** and the subsequent managing of people/locations, there was a considerable amount of additional project management time needed in order to deliver the project.”*

Participating entrepreneur, Challenge Fund

Co-working spaces and affordable rent, however, may still incentivise location to the HUA. One of the entrepreneurs in **Slovenska Bistrica** has secured office space in the refurbished HUA Crouzet cobuilding for her association, where providing affordable rents is a core focus of the Hub. The four entrepreneurs generally indicated positively about renting a desk in the building once ready: one ‘definitely yes’, one ‘definitely not’, and the rest ‘probably yes’.

Even if businesses do not relocate, numerous networks and operations plan to continue. **Genoa**'s “Fair to share” project decided to continue the activity and became a start-up. They are planning to hire two people and capitalise the network built during the HUB-IN project to open several pop-up stores each time in a different place. Some of them are in the pilot area. Moreover, the “Blu - Breeding and learning unit” association is planning to make the “Da Banchi a Pré” project an annual event. They had an endorsement from the Deputy mayor for commerce and they decided to start a fundraising campaign.

The demonstrations of **Belfast**'s Challenge Fund led to growing interest in partnerships and exploitation including (non-exhaustive): local tourism operators such as HMS Caroline keen to incorporate the prototype into their offerings; community groups such as St. Joseph's and the Mary-Ann McCracken Foundation

exploring further; the National Museum of the Royal Navy's Curatorial and Conservation team using the photographic and 3D model data generated from one of the projects and democratising access of these artefacts to the public; the 3D scanned artefacts being used to identify points of conservation and added to digital archive library; Titanic Hotel are now hosting one of the apps and in discussion on ways they can use the technology to further enhance the heritage offering for the building.

Braşov's Hub team is intending to replicate the HUA-based "City as a Classroom" with different cohorts of students - a second edition was launched in 2024 and the Hub team would like the program to be annual. **Grand Angoulême** has hosted an additional two artists Open Calls since the first (too early for results at time of reporting). In **Slovenska Bistrica**, the growth in networks and new contacts for collaboration has yielded some commercial results for some entrepreneurs, including a partnership contract (winning a year-long contract for collaborating on artisan training), access to a retail channel (securing retail space at a new location), and co-working resources (one of the entrepreneurs secured office space in the Crouzet building for her association).

Consortium's scoring: strong operational results of innovators experimenting in HUAs, and evidence of the networks and access to new areas are highly perceived benefits. A potential challenge is whether gains in networks and knowledge can be maintained after the support, however, as described above, there is indication in some of the pilot cities for their continued viability. Section "Expected Impact 4 (Economic: Job Opportunities and Skills)" below also explores the changes in skills, knowledge, networks and innovation processes experienced by the innovators which can support their viability in the HUA. Thus, a score of "partial" results.

Recommendation (offer low-rent co-working spaces to crystallise Accelerator success): *A common finding was that, in general, innovators do not see the need to locate their business to the HUA in order to prototype there. There was success in the refurbished Crouzator that has already secured one occupant, and another two potentially as they responded "probably yes" when asked if they would locate (four spaces available). As well as networks and other resources, part of Crouzator's offering is commitment to affordable rates for occupants. Municipal-owned buildings may be able to repurpose un- or under-used spaces as co-working spaces and offer incentives such as low rent (or other) to attract occupants, and thereby encouraging an Accelerator's networks and knowledge gains to embed more deeply in the HUA.*

Increased rehabilitation of underused land

Some Hubs saw nascent findings for reusing and repurposing open public land, such as **Braşov's** Action 1 "Transforming the Public Realm", which reclaimed 938m² of physical space in public squares from illegal occupation by tourist-driven restaurants and cafés. And also Action 2 "City as a Classroom", in which some of the 41 next generation students experimented in designing urban furniture for residents' resting and socialising spaces in the public squares (see "Increased well-being of local citizens" for insights on spontaneous interactions amongst community users etc). **Genoa** tackled somewhat opposite issues: attracting tourist and visitors *into* an underused HUA with a reputation for safety issues (Actions 1-4 "Urban Outfitting"; "Public Art"; "Creative Storytelling"; "Experimental Call"), with some observational evidence of increased visits and desires for replication. Footfall sensors and representative probability-based surveys were not available due to protected heritage facades and stakeholder fatigue, but 83% of respondents to a visitor survey either Agreed or Strongly Agreed that the Actions drive footfall and attractiveness (158 sample size). The majority of respondents were from Genoa, and a third from within the HUA communities themselves, i.e. basing their assessment on local lived knowledge of the area's needs and potential. **Grand Angoulême's** Metropolitan Trail does not open until after the programme ends, but during co-creation has identified 152 heritage sites and 27 partner places along the trail that intend, by drawing footfall and awareness, to stimulate the medium-term re-use of disused spaces from its industrial and environmental history. **Utrecht's** Action 1 "Supporting the Hub" supported the local creative hub with professionalisation. As a result of improved governance capabilities, steps are being taken for greening the HUA - specifically, plans include planting extra trees and shrubs (this will cause a few parking spaces to disappear) and creating green strips / wadis on Gietijzerstraat and Walsერიjstraat to collect rainwater.

Challenges apply when rehabilitating land amidst conflicting (commercial) interests: the reclamation of the public square space (1,816m² of illegal occupation in 2021 reducing to zero in 2023) was partially lost in 2024 as illegal occupation by tourist-facing hotels, restaurants and cafés expanded to cover 878m² (equivalent to about 30% excess above permitted usage of the public squares) - still a net reclamation of 938m² for the public, but without specific measures the illegal expansion looks likely to increase year by year. Unfortunately, the public domain administrator did not continue the implementation phase of adopting the Guide through a Mayor's decision or a Local Council Decision, and local / national elections have created uncertainty: once the political context is more stable it will be clearer for the Hub to see possible next steps.

Other Hubs converted individual historic buildings into communal areas, with some success.

Slovenska Bistrica's Action 1 "Crouzet as a Hub" experimented with refurbishing an underused historical building as a co-working space, with a community / multipurpose room and a four-workstation office. Though too recent to be occupied at the time of reporting, they aim to offer a resource for start-ups, small businesses, and creative individuals in the city, integrating modern concepts into a heritage building and drawing activity to the area. Planned projects include environmental fashion sustainability workshops for children; street theatre performances featuring local tales; an exhibition of old communication equipment permanently housed in the Crouzet; and a series of workshops promoting mental health with a focus on local stories and heritage as the central theme. Similarly, **Lisbon's** Mocathon consisted of a competition of ideas and a marathon of intervention in a 70-year-old 1,000 m² municipal wash house which has been vacant for several decades. 16 students, four private sponsors, two local association and two public sector bodies came together to clean and embellish the space with: 65 plants to cool the patio; four canvases to cast shade; multi-purpose outdoor furniture for leisure and playing; a solar-based light projector for a cinema stage; and a new playground for children to enjoy the space. Unfortunately after the end of Mocathon the space was closed again to the public due to safety reasons and lack of personnel for its maintenance. In the future the parish needs to reopen the space for public use and ensure its maintenance so it can impact the community. Although the space could not be opened, 95% of the students rated its ability to improve "public space" as "mid" or "high" (out of options "low", "mid", "high"). Additionally, almost all reported that their awareness of derelict heritage spaces had increased due to the project (95%) - and about 80% of them were newly experiencing the cultural building of Patio do Moca for the first time.

Accelerator SMEs were encouraged to locate in the HUA, although results are mixed at this stage (see "Increased attractiveness of the HUA as a location for prototyping or business operations" above).

Consortium's scoring: the above were held to be evidence of partial results towards HUB-IN's medium and longer-term goals.

Recommendation (balance "soft power" with regulations to prevent backsliding): *in the case of illegal space occupation, large gains were made from voluntary uptake of the guidance by the local commercial sectors, built by goodwill and aligning interests during the Hub's co-creation processes. However, commercial pressures may ultimately prevail - formal enshrinement (and enforcement) of guidance in Regulations or Mayoral Decisions may be required to prevent progress being quickly undone once the high energy mobilisation phases finish. This may also require "striking while the iron is hot" to capitalise on political will: elections and departmental shuffles create an uncertainty and instability that may place an ongoing pause (or veto) on formalisation.*

Impacts

Benefits potentially detectable *after* programme timescales.

Reduction in gentrification processes

Gentrification is a medium- or longer-term phenomenon that may still take place over years, rather during the months of Action implementation. HUB-IN does not aim to directly address the affordability or availability of housing and does not expect to see reversals in these during programme lifetimes.

As cited in D5.1 (Common Impact Assessment Framework)¹⁵, there is often an inherent trade-off between regeneration and gentrification: by its nature, regeneration makes an area more attractive to live and work; more attractive areas thus may see increased demand for housing; increases in the demand for housing puts pressure on the limited housing supply; this new balance of demand and supply creates an upwards pressure in prices; this increase in prices makes the residential properties less affordable to the local inhabitants; and as a result local inhabitants are displaced by more affluent incomers. Thus, it is considered unlikely that regeneration will “solve” or completely reverse gentrification in the HUAs.

Gentrification and displacement risks were uncovered in **Utrecht’s** pre- and post- studies: some concern raised amongst supported artists and public sector stakeholders that a near-future influx of investment and development may inadvertently exacerbate gentrification pressures, leading to increased property values and potential displacement of the long-standing (creative) businesses.

*“As long as **no housing is built** in the area, everything will be fine, I think. Then a lot of creativity remains.”*

Supported artist

Recommendation (drive social inclusion policies to slow, rather than reverse, gentrification):

*gentrification is worth cities monitoring over time, to consider how gentrification and displacement can be mitigated to some extent through social inclusion and policy-driven tools. 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”.*¹⁶

Reduction in desertification, abandonment and neglect processes

Similar to gentrification (above), these are medium- or longer-term phenomena that may take place over years. As such, HUB-IN does not expect to see reversals in this during programme lifetimes. Thus, a score of “none yet” with regards to results.

Retention of historic areas amidst tourism pressures (sustainable tourism)

Truly securing local needs in tourist hotspots can be a complex longer-term activity, and HUB-IN does not expect to see reversals in this during programme lifetimes. However, positive future outcomes in “rehabilitation of underused land” could contribute to this. Some cities mobilised neighbourhood-level interventions that aimed to balance resident and tourist needs, and saw preliminary indications of positive movements, and **Braşov** and **Genoa** Hub teams stated there is desire to replicate their tourism-relevant

¹⁵ <https://hubin-project.eu/library>

¹⁶ 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-theresuch-thing-as-gentlyfication/>.

Actions, and in some case already have (e.g. for Braşov's City as a Classroom, a second edition was launched in 2024 and the Hub team would like the program to be annual). **Belfast** approached sustainable tourism from an environmental perspective, setting future aspirations in its "Waterfront Promenade Framework" and "Sustainability Audit" for sustainability certification and destination accreditation in accordance with Global Sustainable Tourism Council criteria (see "Increased inclusion of environmental sustainability principles into HUA redevelopment" below). Thus, a score of "partial" results.

4.2. EXPECTED IMPACT 2 (SOCIAL: SOCIALLY VIABLE REGENERATION)

“New and tested blueprints for the socially and economically viable regeneration of HUAs and cultural landscapes, with enhanced well-being and quality of life, social cohesion and integration”

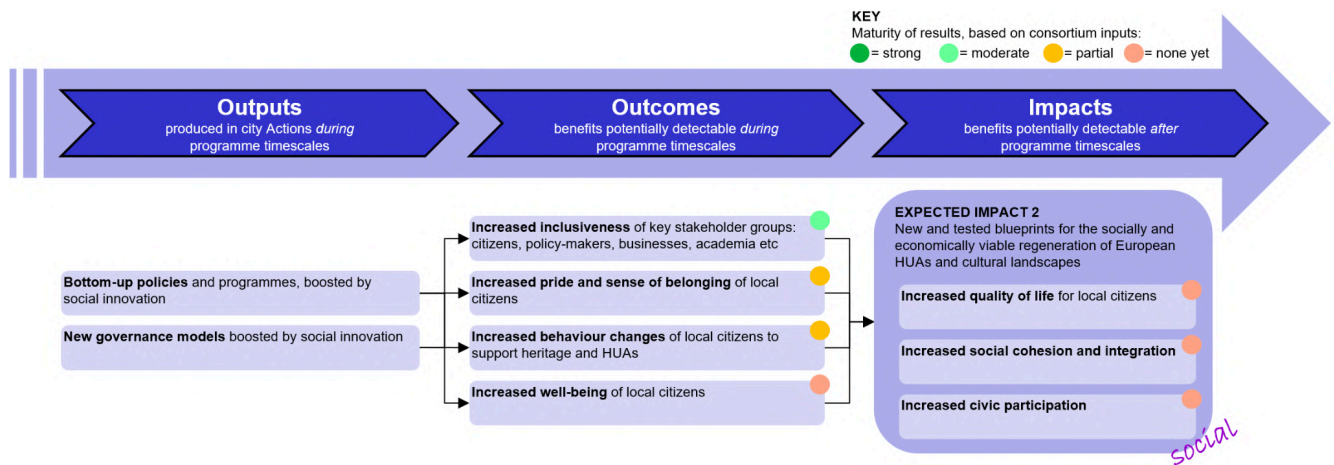


Figure 5: “Expected Impact 2” and consortium scores for results in its component outcomes and impacts

Summary evaluation of results and learnings

Outcomes

Benefits potentially detectable during programme timescales

Increased inclusiveness of key stakeholder groups: citizens, policy-makers, businesses, academia, etc



Co-creation was embedded as a core principle of the HUB-IN tools, and Hub action designs, as guided by the Framework, Toolkit, Roadmapping process etc.¹⁷ For example in **Braşov**, all components of Action 1 "Transforming the Public Realm" involved direct engagement with local stakeholders through one-to-one meetings and public consultations. Different stakeholder categories, such as the HUA HoReCa (hotels, restaurants, canteens) community, relevant public institutions, and citizens, were involved separately to provide specific input. The main consultation process focused on the "Guide for Placing Seasonal Terraces in the Historic Center of Braşov", a working document for both Braşov Municipality's employees and businesses with terraces in the HUA. The public consultation process also played a vital role in refining these guidelines. This process included a series of events such as a press conference, publication of the guide, discussions with the Heritage and Commercial Town Planning Service, the Chief Architect, and the technical department, as well as a public consultation. The public consultation saw the participation of more than 50 individuals, with balanced representation of different demographic groups, ensuring that the voices of both young and older citizens were heard. The gender distribution was also equitable, promoting inclusive decision-making. Following the consultations, several modifications were made to the guide, including changing the size of the tables in the guidance from 75 to 60-80 cm. In Action 2 "City as a Classroom", support from Transylvania University and local organisations was crucial, providing technical resources and expertise. The university's Faculty of Wood Engineering and Furniture Design, along with NGOs like De-a arhitectura, HEBLU and De Graph 29, offered guidance and resources throughout the project. A noteworthy aspect of the pitching event was the involvement of local furniture producers, who were interested in the prototypes developed by the students.

Transparent, deep engagement developed soft power, which assisted voluntary uptake: the Braşov guidelines were introduced for a one-year trial using soft power (not officially adopted by the Municipality). Businesses voluntarily followed the recommendations, particularly those related to

¹⁷ <https://hubin-project.eu/library>

maintaining a consistent appearance. Some businesses even invested in new furniture and white umbrellas to adhere to the guidelines, and some have communicated their adoption of the guide on social media and publicly supported it. This level of adoption based on the personal convictions of HoReCa professionals may be one of the most enduring and impactful changes in the Hub's view.

Partnering for co-creation brought unexpected ideations, including from abroad. **Lisbon** involved students in a competition launched in partnership with C40 "Students Reinventing Cities - Mouraria" and "Students Reinventing Cities - Alfama". This is a global competition format seeking innovative and tangible ideas for a green and just urban future. Cities select a priority urban area for young people to redesign, seeking creative and innovative solutions that address city climate targets, resident priorities and local challenges. Participating students then select a site to develop a proposal for and develop a comprehensive action plan. The competition attracted a large number of students, including representation from international universities, supporting the in-flow of knowledge and ideation into the HUA: the Mouraria competition involved 90 participating students, 23 registered teams, 19 projects presented, 9 international universities, two initiatives that bridged the Hub ecosystem and climate action. The Hub team will display the winning proposals at MCH (Mouraria Creative Hub) as part of the HUB-IN final conference immersive experience. These winning proposals include repurposing underutilised buildings such as the Largo da Rosa monastery and R. Damasceno Monteiro and Calçada car parks into multi-functional spaces with solar panels and green roofs, and a set of five hubs that connect the castle and the river through tactical urbanism strategies ("blue-green", "flexible", "cultural", "movement" and "local" hub). The proposals will be discussed with the city team responsible for the detailed plan for Colina Castelo in order to be integrated in the ongoing revision of this plan during the workshop to be held in October 2024. Lisbon also involved students in Mocathon (more details in "Increased rehabilitation of underused land" above) as well as private, public and community associations. **Nicosia's** Action 2 "Heritage Walks" was designed in conjunction with a diversity of 15 local professionals, experts, and old Nicosia-lovers (this included a historian, a cultural heritage expert, members of the group "People of Cyprus", professional tour guides, members of the Cyprus Tourist Guide Association, a peace educator, an architect, a civil servant, and some members of the non-governmental organisation "Friends of Nicosia") and eventually, six of them submitted ten proposals in total. The Walks reached some of the target audiences, i.e; the wider public of Nicosia (with a good range of age, and residency, including people with disability), creative entrepreneurs, local businesses, schools, institutions, managers of cultural venues, etc. One of the comments received from their guides when evaluating their overall experience from the project was that this initiative is very fresh and much needed for Nicosia, not only because it promotes its history and culture, but also because of the diverse thematics it touches upon.

Positive engagement experiences directly generated some buy-in for replication and scaling.

Genoa also involved students in their actions: in their Public Art initiative, the Academy of Fine Art's Professors carried out a relevant co-creation activity with their students from different Departments, heavily involving them both in the co-design and in the implementation phases. In total, 45 students were involved, of which 34 females and 11 males. The creation of the various works of art involved moments of close cooperation with local residents and associations. During the story collection days, more than 150 people participated. Individuals of different ages and backgrounds sat on decorated seats, each sharing a story connected in some way to the HUA. The experience was so positive for the Academy's professors and students, as well as for the local resident's association (Comitato per Prè), that it will be repeated in the future. Further, for the street party events, the different implementers (Cooperativa Il Cesto-Forevergreen, Academy of Fine Arts, Blu) cooperated to organise a synergistic event to maximise the impact of all the separate actions taking place in the same weekend.

Positive engagement experiences also generated some minor contributions-in-kind. **Lisbon's** Mocathon was able to leverage zero-cost "contributions-in-kind" from connections, due to their interest and engagement. For example, the municipality of Lisbon donated 1m³ of compost soil from the municipal organic waste treatment plan and 20 shrubs, 9 tree plants and 20 ivy plant from several municipal nurseries; private-sector companies donated 9 recycled 2m plastic beams, and 10 boards of black insulating cork, and a Green Wall system of 1.3x1.3m that was assembled with succulent plants. These materials together with reused wood pallets were used during the fabrication of a furniture kit at FABLAB and / or planted into large flower pots which were placed within the washbasins. Another Sprout Tank initiative will also take place before the end of 2024.

“Inclusion by design” needed to recognise (and overcome) barriers such as fragmented interests.

Specific challenges needed to be overcome in **Belfast**'s Action 1 "Waterfront Promenade Framework", regarding the fragmentation of landowner interests: the area falls under the responsibility of several landowners and developers, working to different masterplans and timescales. Ecosystem engagement succeeded with a breadth of landowners, interested parties and other stakeholders including Maritime Belfast Trust; Belfast Harbour; Belfast City Council; Innovation Belfast; Titanic Quarter Limited; Department for Communities; Department for Infrastructure; Department for Economy; Department for Agriculture, Environment and Rural Affairs; Tourism NI; and more. The local co-creation activities revealed five top improvements: more places to eat; more green areas; more public toilets; walking and cycling trails; and more quality events. The inclusive approach also enabled a subgroup to be established to drive the Action Plan forward - to date several initial meetings have taken place with potential partners and stakeholders to discuss some of the actions. Upcoming phases will require agreement on methods for financially resourcing its delivery.

*“A very important step in the creation of a world-class waterfront here in Belfast. By **working with all of our key stakeholders** and delivering against these objectives, we will create a **world-class destination** that will be for the **benefit of Belfast city and the wider area.**”*

**Director of Belfast Regeneration
Department for Communities**

Braşov's Action 3 "Immersive Night-time Experience" likewise revealed potential conflicts of interest between community aesthetics and commercial pressures for retailers: data from 91 qualitative study surveys emphasised that illuminated advertisements and commercial lighting of shops in the HUA pollute light and create, sometimes, the feeling of the old station bazaar. Guidelines were established for street, commercial, and architectural lighting to ensure harmony with the historic environment, and the strategy was unanimously adopted by the Local Council on February 27th, 2024.

*“The rectory should be lit, the Black Church as well, and the old houses in the centre, **there should be no more such bright advertisements on the façade** and the way of lighting placement of advertisements should be uniform and regulated.”*

Lighting study participant

Inclusive decision-making structures supported increases in Hub governance and efficiency.

Co-creation and governance events in **Utrecht**'s Action 1 "Supporting the Hub" attracted a good attendance of up to 50 attendees per event in the Hub, including discussions with owners, municipality, creative makers, Open Call applicants and other stakeholders. Data collection and focus groups with the creative sector reveal to the Hub team that HUB-IN is contributing to the Hub's networks, governance and land use in a way that fosters a more effective and connected Hub. Entrepreneurs and businesses indicate that they perceive it very positively that important decisions are made through the general assembly and that BKC membership contributes to making an individual voice heard. This also contributes to the feeling that the municipality is closer. However, it is generally indicated that the decision-making of the municipality in the area is perceived as variable and sometimes elusive. The distance from the municipality to (the functioning of) an industrial estate feels large, and it is indicated that the long-term vision of the municipality does not always align with the more recent developments in the area. The BKC may need to unite even more strongly and become an even stronger interlocutor. Meanwhile, lessons learned have been rolled into Action 4 "Blueprints for Governance": widely applicable governance structures for Hubs have been shared with four Hubs in the HUA.

Yet it is not as simple as opening invites to all: some distrust and fatigue blocked participation

towards municipalities. All Hubs reflected on good relationships locally, but some work in the context of challenging histories. Residents in one smaller HUA were considered less willing to engage with development opportunities if details are requested (a challenge for monitoring demographics), and may have a wariness from other programmes causing stakeholder fatigue in the past through excessive consultations or plans that failed to materialise. Another HUA is a territory that has been the target of several non-HUB-IN projects to integrate the migrant community and regenerate the social fabric, many of

them carried out by non-profit organisations and using subsidies from various state institutions. These non-HUB-IN projects end up not continuing because the grants are not constant. So the community is reluctant to get involved in yet another project that they feel will not continue. Part of the aims of some Hubs is to counter this by using the actions to demonstrate inclusive innovation in the HUA, and thus stimulate an entrepreneurial mindset amongst the residents, encouraging a willingness to engage.

*"[We faced] challenges with how to work with or **overcome suspicion, anger / frustration of residents.**"*

**Participating entrepreneur,
De-incubator**

One of the unexpected negative results is some lack of participation from isolated communities.

This may be dependent on the unique content and socio-economics of the HUA. For example, **Lisbon** found a lot of local smaller cultural communities with very little interconnection with others. In the case of the Mouraria neighbourhood, there are more than 70 different nationalities of residents with very different cultural patterns. This indicates the complexities that HUAs operate under, and that collaboration with local associations already in contact with these communities is essential to mitigate problems of community involvement and participation.

Further, some groups were hard to reach, pending “word of mouth” and snowball effects. For **Grand Angoulême**'s first Caravane, invitations were sent to an initial list of personalities known or met by members of the project team, notably during the feasibility study in 2022. Despite needing to connect with the local CCI sector, the early sessions were dominated by public sector attendance. However, over 13 sessions there was a “snowball effect” whereby artist contacts generated more artist contacts... whereas the first session included artists as one in ten of the total invitees, by the 13th session that representation had grown to about 2 out of every 3 (64%). Attendance saw a 12-fold increase from 11 artists to 145, showing how scale can build over time and the power of gaining access and trust to word-of-mouth networks rather than relying on more standard email or online marketing. This applies in general to hard-to-reach social groups too. **Lisbon** noted challenges in academic inclusion in Mocathon: despite efforts to call diverse academic backgrounds (architecture, engineering and biology degrees) to join the teams, most of the Mocathon participants' experience was on design and architecture. This fact undermined the proposals involving renewable energy to reach self-sufficiency. In order to overcome this there is a need to target more sponsors and technical engineers as students and mentors. There were also challenges with community inclusion: it was also hard to involve the local community due to insufficient action by the parish officials which led to difficulties in reaching out to nearby residents.

In general, there were varying blends of genders, ages and sector representation in co-creation between the “quadruple helix” of public, private, academic and community sectors, although academia seems to have the lowest numbers involved. Each city is a unique blend - more details can be seen in their D5.3 Evaluation Reports.

Public demonstrations of Action themselves were generally open, attracting a mix of attendees.

For example, **Nicosia**'s Heritage Walks saw 99 respondents return a post-walk survey: most were female (77%), under 55 (84%) and from outside the HUA (98%). In **Slovenska Bistrica**'s Crouzet Demo Day, 22 responded out of approximately 30-40 visitors, and half were local residents (living in or near the HUA), supporting the Hub team's ambitions that a fair proportion of awareness benefits are disseminated locally. The majority of ages were over 45 (78%), and also a majority female (77%). **Belfast**'s Challenge Call innovators engaged over 600 users including from local communities, and collected over 37 local and “hidden” stories related to the Maritime Mile's unique local cultural heritage. There was a high proportion of females involved in the Challenge Fund projects (user testing groups etc) at 68% which is significantly higher than the Northern Ireland demographics (51%, source: NISRA), and further, 40% were aged 65 and over, which is higher than the Northern Ireland population of over 65 (34%, NISRA 2021 Census data).

(this result does not fully reflect the gender and age balance as people under the age of 18 were not surveyed due to requirements of parental consent). **Lisbon**'s Pop Ups were held over two days with a total of approximately 250 visitors, 42 of whom were surveyed: predominantly female (70%) and most coming from the Lisbon metropolitan area (55%), suggesting that the benefits of the knowledge sharing extends

outside the HUA to visitors from other areas who can learn about the HUA's unique artisan heritage. The responses indicated a diverse age group, with the largest group being between 25 to 34 years old (43%) and 35 to 44 years old (33%). Other cities have similar variances in demographics of their events.

Accessibility is often an issue in HUAs, but some adaptations supported fuller participation.

For example, respondents on **Nicosia**'s Heritage Walk pre- and post- surveys reiterated the view that the city-centre has small and narrow pavements, which makes it difficult for people with disabilities to visit and join the walks. The walks themselves can not change these known challenges with physical infrastructure, but can promote accessibility in the route design - 68% of post-walk respondents reported the walks had increased accessibility and inclusion "a lot" or "extremely" (across 99 respondents to over 1,000 walkers surveyed). This statement is also supported by the demographics, which shows a diversity in gender, age and residency among the participants. A special walk was also organised towards the end of this activity, addressed to deaf people / people with hearing impairments.

*"Nicosia "lags behind" quite a bit in terms of accessibility for people with disabilities and more specifically for people in wheelchairs. **As a tour guide, I don't have many options** for where to take and guide people in wheelchairs. Sidewalks, paving, entrances, etc."*

Tour guide, Heritage Walks

Fostering genuine inclusiveness of underrepresented groups can also be a longer-term issue.

Participants in **Grand Angoulême**'s Action 4 "Artist Open Call" noted that it brought some benefits in networks and connections. However, a few trail walkers on the interim "Grand Marche" dissemination event also gave feedback that whilst the route took them through historically separated communities that they may not normally visit, there still remained ongoing separation with those communities as they were not participating in the trail. This could be an area to build on in the future by fostering deeper inclusion of those "separated" community members as trail walkers, trial co-designers and active participants.

*"This area [on the trail] is **very separated** - a few years ago one of the houses burned down, there were some burned cars, we have some problems here but they don't integrate, they are not represented on the walk."*

*"The communities we walk through are **very separated**, so we would not normally come here, but **we learn about the area**. Although new to us, the sites inform us of the older heritage. We will **definitely come back again**."*

Walkers, Metropolitan Trail

3 innovators also proposed granular innovations directly related to inclusion and accessibility.

For example, Intermodal and Palácio das Pipocas from **Lisbon**'s Action 2 "De-incubator" respectively mapped accessible routes for people with disabilities to take though the winding and heavily staircased HUA, and explored services for HUA homes to welcome travellers who are accompanying a family member undergoing temporary hospital treatment and have nowhere to stay. Unspecial Tours experimented with a service for blind, special needs and mobility-impaired people to visit and experience tourist destinations and cultural heritage to the full. It is too early for them to have reached large customer bases (or revenues) with their work, as they are early stage prototypes.

Consortium's scoring: the above were held to be early stage evidence of positives relating to the inclusion in co-creation, although this also takes place in the midst of some wider HUA challenges and is too early to detect broader changes in the wider HUA / projects outside HUB-IN. Thus, a score of "moderate" results.

Recommendation (nuance is needed in cases where stakeholder fatigue is an important blocker): for example, the ability to track and incentivise inclusion can be hampered if the HUA has recently seen excessive engagement from other HUA projects - their data collection may have posed a barrier to HUB-IN collecting data afresh on demographics, attitudes, feelings, behaviours etc, and stakeholders may be wary if the stated plans of those previous external projects have not materialised. Nevertheless, Hubs can collect some light data on inclusivity in order to track some basics, either quantitatively or qualitatively as fits the situation.

Recommendation (“word of mouth” can create a snowball effect that reaches hard-to-reach groups): though it may require patience and sustained focus. For Grand Angoulême’s first Caravane, invitations were sent to an initial list of personalities known or met by members of the project team, notably during the feasibility study in 2022. Despite needing to connect with the local CCI sector, the early sessions were dominated by public sector attendance. However, over 13 sessions there was a “snowball effect” whereby artist contacts generated more artist contacts... whereas the first session included artists as one in ten of the total invitees, by the 13th session that representation had grown to about 2 out of every 3 (64%). Attendance saw a 12-fold increase from 11 artists to 145, showing how scale can build over time and the power of gaining access and trust to word-of-mouth networks rather than relying on more standard email or online marketing.

Recommendation (leverage local resident knowledge when needing to identify private landowners): Genoa’s Action 1 “Urban Outfitting”, faced significant challenges in identifying private owners and receiving their written authorisation to paint their shutters, but this was overcome with the crucial help of local residents.

Increased pride and sense of belonging of local citizens

HUB-IN does not replace city place-branding, which is much more significant in scope and often targets pride of place and sense of belonging.

However, it does have some results in stimulating a connection to specific local heritage. For example, **Lisbon’s** Heritage Pop Up assessed its impressions on visitors through surveys (42 responses out of approx 250 visitors over 2 days), and gained an understanding on how it contributes to an awareness of local history, through contact with its rich ceramics traditions. About 2 in 3 every responded that the Pop Up demonstrated the diversity and quality of the ceramics from Colina do Castelo (64%) and - importantly - actually inspired a desire to reconnect with ceramics (60%). About half responded that the Pop Up revealed the historical and artistic heritage of Colina do Castelo (55%) and that it made the link between the historic industrial heritage and contemporary ceramics (50%). Taken together, these suggest at least some change in participants’ sense of place regarding Lisbon’s ceramics history. Only 2% of the respondents were from the HUA, so on a broad assumption that this is representative enough of the attendees, the learnings are being disseminated beyond the HUA (55% were from the wider city, 19% from the wider country, and 24% international visitors). 10 were migrants participating in the Pop Up events, supporting the Hub’s aim of promoting social integration of migrants due to knowledge sharing events.

Importantly, a proportion of respondents indicated intentions for new behaviours too: about a third of the Lisbon Pop Up respondents indicated they would visit the HUA more frequently (38%), and again about a third join local art or culture clubs in the HUA (36%). Assuming the participants follow-through, the two-day Pop Up is driving at least some increase in visits and participation in cultural groups in the HUA, with the attendant knowledge sharing and network-building that that may entail. Heritage Walkers in **Nicosia** experienced one or more of ten walks themed on the HUA’s Middle Ages transformations and royalty; to its dynamics between religious power and wealth; to local theatre; to emerging from a conflict-fuelled pasta into an evolving multicultural future; and more. In post-walk surveys (99 respondents), a majority scored on a scale of 1 to 5 to what extent the walks had increased their sense of pride in Nicosia, where 1 = “not at all”, and 5 = “extremely”. A majority (69%) reported an increase by “a lot” or “extremely”. Only 5% responded “not at all”. About half gave feedback that they would participate in more local events as a result (54%), and likewise for showing more interest in the HUA (50%). For Action 3 “Interactive Activations”, a slightly lower increase in sense of pride than the walks - 54% reported an increase by “a lot” or “extremely” - but still positive overall.

*“Many of the participants indicated that they should continue the program because they **discovered their own hidden creativity**. They commented and **looked for ways they could work at home on their own**. (They asked to know where one gets the materials and tools they need).”*

Workshop host / collaborator for Activations of the Hub

Such new behaviours are fundamental to reversing some HUA's more chronic challenges. For example, **Genoa's** aim with their street parties, light projects, artisan pop-ups, and public art is to draw footfall into the narrow streets of the HUA, to combat resident perceptions of feeling unsafe. Encouraging more frequent visits, willingness to walk the HUA, can contribute to this. Installing footfall sensors was not an option in the protected HUA, but the actions were seen to be well-attended - time is needed before any detection can be made on whether this effect will last.

*"We **need to overcome the prejudice** that coming to Via Prè is dangerous: it is absolutely not true."*

Shop owner involved in Creative Storytelling

When pride and sense of belonging were high, participants were themselves keen to replicate the actions or find other ways of contributing to the HUA. **Braşov's** "City as a Classroom" took 41 students through a learning process on urban design, discovering hidden stories of the people and the built environment before experimenting with prototypes for urban furniture that would serve residents with places to rest and socialise in the HUA's public squares. Whilst pride and place and sense of belonging were not directly assessed, several students commented on the effect that discovering the hidden "treasures" of their own HUA had on their desires to participate in its future evolution - with some confirming their desire to return as urban planners after their university studies.

*"[What the experience taught me is that] the local people's stories... represent true **encyclopaedias of unwritten history.**"*

*"This project gave me another perspective on Braşov, so in the future I want to develop these ideas, **participating in the city's evolution** process."*

*"I see myself **using these skills for everyone's purpose**, people need a voice, to feel that they are listened to, so I consider through what I have learned that it is possible, thus a more united community will develop."*

Students, City as a Classroom

Significant challenges often remained, even after successful local initiatives. For example, **Genoa's** actions brought in visitors, lighting and stakeholder buy-in, yet these local initiatives are not expected on their own to have immediate effect against ongoing historic challenges. The post- community survey (353 respondents) assessed the ongoing problems as to whether residents perceived them as a "major" or "moderate" problem (in contrast to "minor" or "not at all"): 98% identified illegal activities, 93% identified lack of security, 79% identified low light, 74% identified lack of innovative businesses, 72% identified lack of ability to attract cultural and artistic associations, and so on. Participants in the actions agreed that all the projects contributed to creating a new way of doing things in Genoa and to imagining a new life and future for its HUA, even if it is not possible to talk of large impacts. In the Hub's reflections: a single project cannot be held responsible for changing the urban system or the social complexity, but the responsibility of the single project should be to open the city's imagination and help its inhabitants see things from a different and new point of view. **Slovenska Bistrica's** Small Local Projects faced similar insights (small sample of 6). Half of the participants remained neutral as to whether "I feel that I can influence the development of the city centre". Yet this wasn't seen as a reason to abandon such initiatives - 100% voted that Small Local Projects should be repeated in the future. **Braşov's** Action 2 "City as a Classroom" saw some disruption by local actors: the arrangement of benches in the tactical urbanism phase was disrupted by the start of the terraces season and the occupation of public space by restaurant terraces in the area. To adapt, benches on Michael Weiss Street were entirely moved to make room for terraces, and the number of benches on Republicii Street was decreased.

And there were some detractors: for example, in **Genoa's** Action 2 "Public Art", a few people were not fond of the presence of the artworks particularly the floor decorations, which received some negative feedback on social media, by a journalist who took this opportunity to attack the local government from a political standpoint. However, the Hub noted that the majority of respondents to questions issued by social

media, as well as tourists at the MEI museum (Museo Nazionale dell'Emigrazione Italiana), appreciated them.

Consortium's scoring: the above were held to be evidence of some partial results towards HUB-IN's medium- and longer-term goals, but within the context that the interventions are small scale (for example, representative community surveys deployed in cities with urban furniture actions revealed that 90% of residents either did not see or did not engage with the furniture) and that it is relatively early to detect any downstream changes in the wider HUA ecosystem. Thus, a score of "partial" results.

Recommendation (include contingency budget in case of vandalism by disaffected citizens): *Braşov's Action 2 "City as a Classroom" saw some vandalism to the street furniture that it deployed in the public squares, and faced some high costs associated with repairing damaged objects.*

Increased behaviour changes of local citizens to support heritage and HUAs

Behaviours are closely related to strength (or changes) in attitudes, feelings and motivations, and have been addressed above where they were essential context for these changes: to avoid duplication, they are not replicated here. See "Increased pride and sense of belonging of local citizens", and "Increased inclusiveness of key stakeholder groups" above.

Consortium's scoring: as per those sections referenced directly above, for the same reasons.

Increased well-being of local citizens

No actions directly targeted physical or mental health as the overarching primary objective.

However, some innovators did propose innovations related to physical or mental health. For example, Pacadio de Pipocass from **Lisbon's** Action 2 "De-incubator" explored services for HUA homes to welcome travellers who are accompanying a family member undergoing temporary hospital treatment and have nowhere to stay.

Several Actions did indirectly involve physical activity on a limited basis, and it's possible that they may contribute in the very minor ways of stimulating desire and opportunity to walk the HUAs. These include the **Grand Angoulême** Metropolitan Trail (opening Spring 2025), the **Nicosia** Heritage Walks, and all Actions that involved exploring the HUA. **Belfast's** "Waterfront Promenade Framework" aims specifically to enable active and sustainable transport project that: create more walkable and cyclable urban districts at the waterfront; connect multiple urban neighbourhoods with the waterfront promenade; build new bridges across the River Lagan to create new walkable connections; and make accessibility improvements serving all Belfast communities.

Further, some co-creations indirectly supported physical and psychological safety... **Braşov** aimed to set the foundations for Action 3's "Immersive Night-time Experience" in the HUA through improved and strategically designed lighting in a HUA. The lighting will involve a technical aspect, such as types of lighting permitted, efficiency standards etc. However, participants in the survey (91 responses) indicated feelings of insecurity: that the HUA is unsafe at night due to poor lighting, leading to encounters with wild animals, stray dogs, and potential wrongdoers. They wanted better lighting to create a sense of safety - these feelings of physical insecurity are a major reason for not visiting the HUA at night, and largely driven by the lighting issues which exacerbate a lack of law enforcement in the areas. The subsequent activity involved evaluating existing lighting conditions and developing a master plan with conceptual designs and technical specifications. Guidelines were established for street, commercial, and architectural lighting to ensure harmony with the historic environment. The strategy was unanimously adopted by the Local Council in February 2024, and the Municipality of Braşov released a new regulation for advertising, publicity and display activities within the city, which is currently in the approval stage (not yet adopted in the Local Council).

...as well as well-being driven by (serendipitous) connections and social interactions. For example, the urban furniture designed by "City as a Classroom" installed QR codes on each object to raise awareness and capture feedback. As responding to the survey relied on goodwill, responses were limited (15). But they give insights into ways the furniture is used:

- *a slight majority (53%) strongly agreed on the furniture's ability to invite relaxation:* which indicates some positive impact on creating non-tourist resting spaces within the public squares.
- *3 in 4 give positive feedback on the urban furniture encouraging interactions:* this indicates some success in fostering social engagement among visitors, in terms of spontaneous interactions with other people or passersby whilst testing the urban furniture. 3 in 4 are also likely to recommend the furniture to others - this positive feedback reflects the likelihood of word-of-mouth promotion and community engagement discussions stimulated by the furniture.
- *the vast majority feel safe using the furniture*
91% agree or strongly agree, although the remainder strongly disagree - i.e. there is no middle ground in this view.

*"I let my junior **explore it**, he was very excited."*

*"[How did I interact with this urban furniture object?] Simply sitting, reading, **spending time with someone.**"*

*"I rearranged it, took a seat and **people appeared to chat with :) "***

*"**I rested...** there are no benches in the area."*

*"**I tried to sleep** on it, very uncomfortable, add some pillows..."*

Urban furniture users

The cultural installations did not have to be mainstream to be effective in driving connections.

Verbal feedback from a few participants at **Grand Angoulême**'s launch events indicated that whilst perceptions of individual art pieces may vary from positive to negative, they can still generate curiosity and pride and interaction regardless - this is important as it gives cities the freedom to be bold with commissioned art works and let the artists innovate. Likewise in **Genoa** A few people were not fond of the presence of the public artworks, particularly the floor decorations, which received some negative feedback on social media, by a journalist who took this opportunity to attack the local government from a political standpoint. However, the majority of respondents to questions issued by social media, as well as tourists at the MEI museum (Museo Nazionale dell'Emigrazione Italiana), appreciated them.

*"This performance is meaningless, I hate performative dance, it means nothing. But at least it **gets people talking** to each other - **I met people there** watching and we decided to go to the Château later together."*

Resident, aged over 65 years

Impacts

Benefits potentially detectable *after* programme timescales.

Increased quality of life for local citizens

This is a medium- / long-term indicator, with results not expected within programme timelines, as quality of life is subject to numerous factors in an individual's internal and external environment, as well as a multitude of indicators that HUB-IN does not directly seek to address (e.g. feelings of control over one's own life, strength of social support system) etc.

If Hubs can continue with actions that address pride and sense of place - either through new actions or by enabling other projects in a flywheel effect of unlocking resources - then these indicators could suggest a contribution to overall quality of life. There are preliminary results of such changes (see "Increased pride and sense of belonging of local citizens" , but results of the neighbourhood-level actions are currently far too early to detect or forecast any significant scale of changes in quality of life for HUA or city residents overall.

Increased social cohesion and integration

This is a medium- / long-term indicator, with results not expected within programme timelines. If Hubs can continue with actions that address inclusivity - either through new actions or by enabling other projects in a flywheel effect of unlocking resources - then successes could suggest a contribution to overall social cohesion and integration.

Increased civic participation

This is a medium- / long-term indicator, with results not expected within programme timelines. If Hubs can continue with actions that address inclusivity of residents, as well as targeting their motivations to engage with direction-setting in their HUA and behavioural change to do so, then success could suggest a contribution to overall civic participation - in terms of active participation in redevelopment of the HUA.

4.3. EXPECTED IMPACT 3 (ENVIRONMENTAL: CULTURE-RELEVANT LANDSCAPES)

“Boosting heritage and culture-relevant innovation, creativity, entrepreneurship and light ‘reindustrialization’ of HUAs and cultural landscapes”

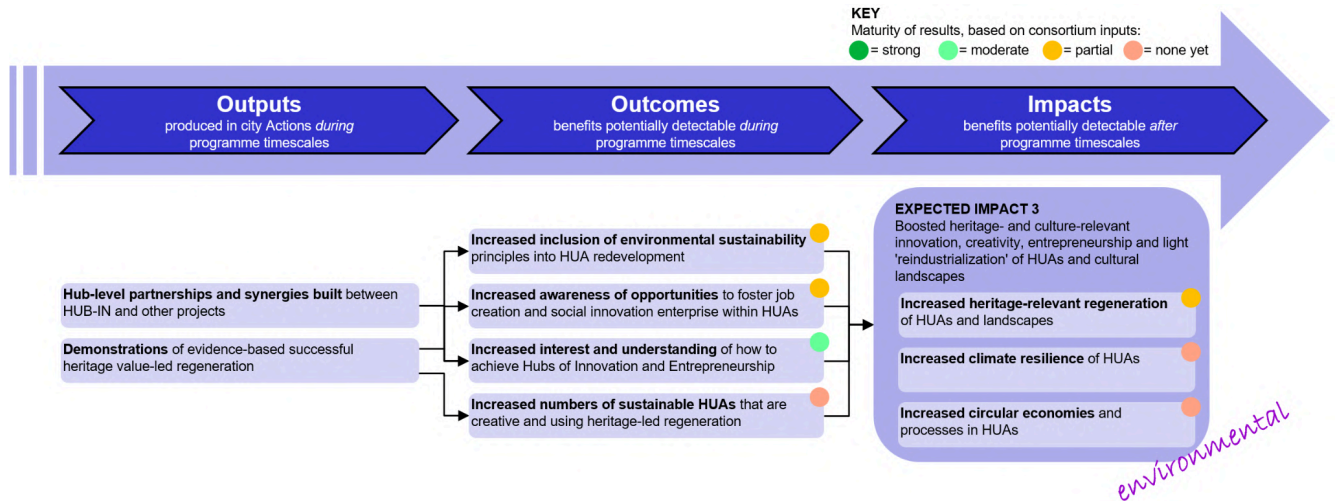


Figure 6: “Expected Impact 3” and consortium scores for results in its component outcomes and impacts

Summary evaluation of results and learnings

Outcomes

Benefits potentially detectable *during* programme timescales

Increased inclusion of environmental sustainability principles into HUA redevelopment



Co-designed strategies and policies leveraged the environmental concerns of the co-creators. For example, **Utrecht's** Action 1 "Supporting the Hub" supported the professionalisation of the BKC creatives hub and improvements in their capacity for HUA interventions. Entrepreneurs and businesses in the area expressed in the focus groups the following perception: from within, it is felt that clear initiatives have been taken to achieve improved organisation. This process still needs to be completed and approved by the members: steps are being taken for greening, and much more attention has been paid to (traffic) safety in the area, to significantly improve the overall experience for businesses and their visitors and customers. Specifically, plans include planting extra trees and shrubs (this will cause a few parking spaces to disappear) and creating green strips / wadis on Gietijzerstraat and Walscrijstraat to collect rainwater.

The "Waterfront Promenade Framework" in **Belfast** recognises that the Maritime Mile is itself a blue asset, and its future development needs done in close connection with its ecological value and services. Three unique typologies now guide the connected development of the HUA's future waterfront, based on shoreline typology, building density and programming:

- *urban* hard shoreline and higher building density
- *maritime* hard and soft shoreline and interest-specific attractions
- *natural* soft shoreline and recreation attractions

A versatile 'toolkit' of interventions forms the starting point for solutions in each typology, including for example: onsite renewable energy generation (solar, wind, tidal); waste management programmes; sustainable drainage systems that mimic natural processes; cycling infrastructure to encourage modal shift away from petrol vehicles etc. A key principle is to maintain a "living shoreline": environmental engineered shorelines create access to the water, fostering a sense of connection and responsibility whilst also supporting the harbour's ecosystem services.

Their Action 2 "Sustainability Audit" linked in with this aspiration by delivering a comprehensive sustainability audit to understand the current sustainability agenda on the Maritime Mile. Academic, community, private, public and voluntary sectors were all represented across the 37 participants, and collaborative future projects were identified including "boosting leadership on sustainability issues" (establishing a joint, green subcommittee or working group for overseeing the the sustainability agenda and to establish joint funding, procurement and resource sharing opportunities), and "establishing formal sustainability credentials for the Maritime Mile" (progression towards an official sustainability certification and destination accreditation, based on criteria from the Global Sustainable Tourism Council that could benefit investment, visitation, and marketing opportunities). Other potential projects were also identified.

The lighting masterplan in **Braşov's** Action 3 "Immersive Night-time Experience" was formed in conjunction with consultation of residents (description in "Increased well-being of local citizens" above). In feedback from experiential walks and surveys, the overwhelming majority believed that the public lighting in the HUA must be as "green" as possible, consume as little energy as possible and be sustainable. Thus, solar panels and LEDs are seen as of paramount importance and the resulting strategy's conceptual designs and technical specifications emphasise minimising light pollution and adhering to sustainability principles. The Municipality of Braşov released a new regulation for advertising, publicity and display activities within the city, which is currently in the approval stage (not yet adopted in the Local Council). An educational component of this lighting study was also integrated into the Action 2 "City as a Classroom".

Several SMEs reported increased environmental skills, even if not the focus of their products.

In **Lisbon's** Action 2 "De-incubator" 100% of respondents left the accelerator scoring their skills in "entrepreneurship and innovation that is environmentally sustainable" as either "high" or "very high" (on a 1-5 scale from "very low" to "very high"). In contrast, 57% had entered the accelerator scoring their same skills as either "low" or "very low" (sample of six respondents). During the acceleration programme, the pillar of sustainability and its relation to cultural heritage and entrepreneurship were present in all the activities. None of the innovators' projects were directly related to environmental innovation, yet this now appears to be at least a partial skill set in the supported entrepreneurs. In **Belfast**, the "Challenge Call" innovators left split equally between "mid", "high" and "very high" self-assessments in this skill (sample size of six), whereas before the accelerator a third (two respondents) rated their skills "low" and the rest "high".

Some other innovators did more directly target sustainability, such as the host of recycled aluminium jewellery workshops in **Slovenska Bistrica's** Action 2 "Crouzet Accelerator". The jewellery is based on traditional metalworking techniques passed down from generation to generation and materials come from a local aluminium factory (2kg/year), contributing in a small way to the local ecosystem and reducing impact on the environment (local transport of materials). Any unused material is returned to the factory for melting and production, establishing a zero-waste cycle. These workshops not only promote eco-friendly practices but also provide a platform for artistic expression through wearable art, utilising materials sourced from the HUA's local environment. The supported innovators are mostly in the very early stages of their entrepreneurial journey, too early to have attracted revenues. Similar to Lisbon, 100% of respondents left the accelerator scoring their skills in "entrepreneurship and innovation that is environmentally sustainable" as either "high" or "very high" (on a 1-5 scale from "very low" to "very high", sample size of four), although three of the four had already scored "high" or "very high" prior to entering the accelerator, and the remaining one considered their skills only intermediate.

Community participants reported the value of environmental interventions in HUAs, although this is not the same as them having developed related entrepreneurial skills themselves, or the actions generating sustainable results. For example, in **Lisbon's** Sprout Tank's Mocathon, proposals for readapting the 70-year-old municipal wash house frequently referenced local environmental challenges such as heat island effect, water consumption, biodiversity loss and food production. About 9 out of every 10 participants reported an increased awareness of sustainable solutions for heritage in urban areas due to the project (89% out of 19 responses). **Slovenska Bistrica's** Small Local Projects' "map of wishes" produced by the 29 members of the local community promoted ideation on opportunities for the development of the heritage Crouzet space and its role promoting and enabling interactions with the community. Within the community's wishes were concerns for waste management and more green spaces. 100% of post-action survey respondents agreed that the placemaking actions should be repeated, with one respondent commenting on the simple need for them: "because someone has to" (small sample of 6).

One Hub saved an estimated 384kg CO₂e by exercising control over their Hub's refurbishments, by specifying environmental credentials / approaches in the contracts for redeveloping the space.

Slovenska Bistrica's Action 1 "Crouzet as a Hub" experimented with refurbishing an underused historical building as a co-working space, with a community / multipurpose room and a four-workstation office. The design concept for the co-working space was developed in collaboration with local stakeholders such as social enterprise KNOF which specialises in developing circular business models. As a result, the majority of the furniture in the co-working space was acquired through reuse or made from recycled materials. To the estimates of the Hub and their third party supplier, this saved a potential 384kg of greenhouse gas emissions (in CO₂e, or equivalent carbon dioxide) due to: furniture saved from incineration by purchasing reused furniture, and furniture made from recycled materials.

Some Hubs embedded environmental sites into trails, to inspire investment in the future. For example, **Grand Angoulême's** Action 1 "Mapping Historical Heritage" collects the sites that will form routes on a Metropolitan Trail that will launch in Spring 2025. One of the aims for the site discovery activities is a better knowledge of the green and blue heritage amongst communities and professionals. Approximately 150 sites were identified for the trail, with the place-history data grouped into 12 categories including four relating to environment: Agricultural (5% of sites), Hydrography (10%), Garden (6%) and Natural (6%). Examples include: an old corn farm with experiments in soil remediation that bring dead soil back to life through replanting trees and organic matter; and an outdoor swimming pool from 1959 which has at times featured a beach volleyball court, 3-star campsite, youth hostel, Old Métis music concerts but has been considered a wasteland for almost 20 years. Once the trail is opened, it is hoped that visitors will engage with the environmental sites either thematically by rolling their stories into creative sector products, or economically by proposing investment and adaptive reuse of the land. Participants in Action 3 "Caravane Creative Lab" ideated proposals based on the sites, including "an idea focused on the water cycle in the environment: couple it with imagination, a civilization more in harmony with the waterways... secret passages, water tunnels, hidden rooms...", "a floating structure on the Charente providing a viewpoint / resting point, with a geomagnetic study and social design", " a solarpunk animated film about the anticipation of the semi-wild or permaculture reappropriation of abandoned places, such as quarry or railway wastelands" etc. From the summer of 2024, the Action 4 "Artist Open Call" also featured innovations will be exhibited in more than 10 communes across the region.

Consortium scoring: environmental considerations featured in a number of Actions and future plans, yet it is still too early to detect quantitative changes in, for example, HUA carbon emissions or waste to biodiversity etc. Thus, a "partial" score.

Recommendation (use co-design to leverage the increasing topicality of environmental sustainability): *environmental sustainability is increasingly topical amongst communities and likely will be increasingly so. Co-creating ensures these voices are heard - but whilst communities supply the "why", this may need balanced with experts who can supply the practical "how". Municipalities and business might need to work together on "who pays": actions have shown that businesses are also open to environmental sustainability and even committing to starting Working Groups for their area, but the reality of commercial pressures means this is greatly assisted if benefits can be shown in order to make it an addition (not a sacrifice) for their bottom line. This may include the ways in which various green accreditations can benefit investment, visitation, and marketing opportunities etc, or other aspects of the green market.*

Increased awareness of opportunities to foster job creation and social innovation enterprise within HUAs



"Expected Impact 3" in the Grant Agreement contains some references to scaling / exploitation that include other factors beyond environmental concerns, such as broader job creation etc. If HUAs are to truly become climate resilient, and / or circular economies, they will need job creation and social innovation that enables that and so this indicator is retained here. A more economics-focussed assessment is contained in "Expected Impact 4" below.

Opportunities around job creation required some adaptation to learn from initial barriers. For example, all Hubs with Accelerators adapted the focus of the themes, support and mentoring based on consultation with stakeholders. **Lisbon** gained experience in Action 2 "De-incubator" of needing to significantly adapt their application methodology. The Hub had initially planned to scout out innovators and entrepreneurs who mostly lived in the HUA (Colina do Castelo). Although the focus remained on solutions with a social, environmental and heritage impact in the Colina do Castelo area, it was soon realised that the neighbourhoods in this area did not have the critical mass of people with the right profile to join the acceleration programme (a population that was not very entrepreneurial, was ageing or focused on traditional small businesses with little capacity to innovate). There was therefore a need to adapt the methodology and open up the programme to entrepreneurs from other territories. In this new context, a portfolio of national and international entrepreneurs came together and worked collaboratively to respond to local needs.

Some entrepreneurs in the Accelerators have attracted further investment / funding outside HUB-IN that points to their ability to foster socially innovative job creation, such as in **Belfast** and **Utrecht** but they are not necessarily focussed on environmental solutions. The wider aspects of job creation are discussed in see "Sustainable new jobs created or supported" below.

Other innovators have experimented with environmental sustainability products and services, such as **Slovenska Bistrica**'s Action 2 "Crouzet Accelerator" jeweller, who uses traditional metalworking techniques passed down from generation to generation and materials from a local aluminium factory. See "Increased inclusion of environmental sustainability principles into HUA redevelopment".

And some Hubs have capitalised on opportunities to replicate their actions more widely, such as **Utrecht** leveraging lessons from supporting the professionalisation of the BKC creative hub in Action 1 "Supporting the Hub", and scaling them in Action 4 "Blueprints for Governance" by supporting other creative hubs in implementing the learnings on governance and capacity.

To some extent, HUB-IN itself is an exercise in gaining awareness of the opportunities to foster job creation and social innovation enterprise within HUAs, and in general across the Hubs the pilot cities have gained experience regarding what works well and not so well for broader job creation and social innovation as it relates to heritage and cultural landscapes. Those findings are reflected in cross-city summary form in this document, and in per-city detail in their D5.3 Evaluation Reports. Wider findings regarding opportunities for social innovation exist beyond the scope of this document, for example the Hub's other action ideas contained in their Roadmap and broader visions for the HUA etc.

Challenges still remain, especially given the medium- / long-term nature of regeneration. Those are likewise reflected in cross-city summary form in this document, and in per-city detail in their D5.3 Evaluation Reports.

Consortium scoring: based on the evidence and insights above, awareness of opportunities was considered to be "partial" results in the scoring exercise.

Recommendation (clearly communicate the value-add in order to engage and assure quality):

Slovenska Bistrica notes that it would also be good that social innovation initiatives have clear value-added messages ("what is in it for me / for my community") and also clear communication on the value of such activities to various municipal departments that can otherwise represent a barrier if excluded from planning and on-going conversations about such initiatives (especially the public spaces work team). Judging from the number of proposals that didn't make it through the selection criteria for the first Accelerator and Crouzet Hub events programme call, it is important to invest time and effort into familiarising the stakeholders and the public of the novel initiatives and their particularities through more intensive processes of awareness raising, capacity building and inspiration.

Increased interest and understanding of how to achieve Hubs of Innovation and Entrepreneurship



Over 210 organisations / associations participated across the Hubs, at an approximate split of 28% public sector, 42% private sector, 10% academic, and 20% community. This is on average 26 per Hub, although there is of course variance between the Hubs that reflects their corresponding sizes and contexts (15 at the lowest, 40 at the highest). The numbers are not intended to be exact, because in some cases for ease of efficiency the Hubs group smaller entities together in their stakeholder tracking (e.g. where Hubs have tracked for example “commercial users of the co-working site” this could contain multiple small groups or individuals within). Any additional gains from precise tracking of the numbers of exact individual stakeholders or smaller groups would not be proportionate to the effort involved.

The highest rates of interest are from the private sector, as 42% of stakeholders in Hub actions, in varying roles of designing, developing, delivering and innovating. This interest is promising, because commercial viability is a crucial component of heritage-based entrepreneurship, if it is to escape the requirements on public funding and subsidies. For example, the private sector played a leading proportion in **Belfast's** Action 2 "Sustainability Audit" (see details in "Increased inclusion of environmental sustainability principles into HUA redevelopment"), where survey respondents from the data collection included 17 private sector, 7 voluntary sector, 6 community, 5 public sector, and 2 academic representatives. See "Increased inclusion of environmental sustainability principles into HUA redevelopment" for more details. In **Braşov's** Action 2 "City as a Classroom", the students presented their proposals for urban furniture to a jury, which included furniture manufacturers who could invest in replicating the objects / urban furniture - this signals local interest, and that the proposals were taken seriously as potential commercial offerings. Private sector involvements are also evident in general across almost all Actions, and perhaps most focussed in the Accelerators where some of the mentoring and training modules included customer discovery, business and investment pitching etc. See "Sustainable new jobs created or supported" below for outcomes relating to revenues, funding and investment attracted etc.

The private sector also gave some signals of disinterest, which led actions to be redefined. For example, **Lisbon's** Action 1 "Castle Hill Network" originally envisioned a "HUB-IN Stamp" which would be the result of co-creation activities with local creatives, and essentially be some kind of mark of quality or accreditation. The various events to create this showed a participation below what was expected making this one of the biggest challenges of these actions - this low engagement level undermined the development of the HUB-IN Stamp. This activity was designed in a bottom-up spirit to help the involvement that was already too little, both from entrepreneurs or other stakeholders. However, the low engagement also triggered a redefinition of the Action towards a digital hub. From all the defined and performed activities, and picking up on the positive notes, especially the manifest necessity of a networking platform, the idea of an improved digital tool started to take shape. This tool, which likely will be a web app, will offer the opportunity to access the georeferenced database (GeoTool), perceived by the event participants and stakeholders as an important aspect. It will also provide a digital platform that will stimulate the interactions among the various CCI stakeholders, and disseminate their activities and businesses to the public in general. Lastly, the included and mapped projects that were aligned with the HUB-IN principles and values would be distinguished with a HUB-IN Stamp, making them stand out in a virtual community.

And the private sector (or subgroups within it) occasionally reneged on initial progress made. In **Braşov's** Action 1 "Transforming the Public Realm", a strong positive was the voluntary uptake of the guidelines for how tourist-facing businesses (hotels, restaurants, cafés) use public space in the squares and streets, particularly those related to maintaining a consistent appearance. Some even invested in new furniture and white umbrellas to adhere to the guidelines, and some communicated their adoption of the guide on social media and publicly supported it. Between 2021 and 2023, 100% of illegally occupied public space (1,816m²) was entirely reclaimed for public use. However, after the first year, the public domain administrator did not continue the implementation process of the Guide - i.e. it has not been adopted through a Mayor's decision or a Local Council Decision. Without specific measures, several commercial agents have since illegally expanded their terraces again, and a significant difference has re-emerged between the area officially reported by commercial agents and the area occupied by the terraces (878m², about 30% above officially allowed space).

Public sector bodies form almost one third of the participating organisation types, at 28%. This is somewhat expectable as the municipalities play such a strong role in place strategy, and are occasionally the owners of buildings used in the Actions. This is also not necessarily an issue, as the public sectors' involvement signals leadership - one of the key elements of the entrepreneurial ecosystem that are "the ingredients of a HUB-IN Place"¹⁸. For example, in contrast to pre-existing tours in **Nicosia**, the Heritage Walks were coordinated by the Municipality, which empowers stakeholders to be engaged in a very active way in the process and project. Before this intervention, the guided tours in the city were mainly organised by other stakeholders, more or less formal. Thus, this action appears as the first programmed and organised effort to run such activities coming from the Municipality. That was one of the comments received from the guides when evaluating their overall experience from the project - that this initiative is very fresh and much needed for Nicosia, not only because it promotes its history and culture, but also because of the diverse thematics it touches upon.

Public sector was occasionally overrepresented at early stages, but showed it can balance out over time. For **Grand Angoulême's** first Caravane, invitations were sent to an initial list of personalities known or met by members of the project team, notably during the feasibility study in 2022. Despite needing to connect with the local CCI sector, the early sessions were dominated by public sector attendance. However, over 13 sessions there was a "snowball effect" whereby artist contacts generated more artist contacts... whereas the first session included artists as one in ten of the total invitees, by the 13th session that representation had grown to about 2 out of every 3 (64%). Attendance saw a 12-fold increase from 11 artists to 145, showing how scale can build over time and the power of gaining access and trust to word-of-mouth networks rather than relying on more standard email or online marketing. This applies in general to hard-to-reach social groups too.

"Without HUB-IN, it would have been difficult to convince people of the value of such an approach. Many of the partners found it hard to see themselves in the project before they got there."

**Action lead,
Caravane Creative Lab, Grand Angoulême**

As well as leadership, public sector bodies also brought bureaucracy that needed overcome. For example, in **Genoa's** "Passages of Light", the project aimed to regenerate and improve the HUA's famous Via Del Campo through arts (lights, music, images and words). However a challenge was faced as the National Authority of Cultural Heritage denied permission to install projectors on the protected building's walls. The project implementer overcame this rejection by creating a network with some of the shops in Via del Campo, which ended up hosting the projectors inside their premises, showing the planned images in their shop windows for passers-by to see. In this way, they increased the involvement of inhabitants and local businesses in the project, who felt a sense of belonging with it and a strong cultural identity. **Utrecht** also noted in Action 4 "Blueprints for Governance" some unexpected negative results regarding the relationship between the municipality and hubs. This shifted the value of the lessons learned more towards the municipality rather than the individual hubs - the municipality of Utrecht is involved in setting up many hubs throughout the city, so the decision was made quickly to create a plan to share the lessons learned within the municipality so they can use the lessons to improve their relations with existing hubs.

Some barriers blocked academia participating more in actions (approx. 10% of organisations).

For knowledge transfer and "knowledge triangles", academic involvement is important as practical pilots or developments can feed back into research agendas and student training. Some challenges existed with attracting the right diversity and scale. For example **Lisbon** cites challenges with academic inclusion in the "Mocathon" redevelopment of a 70-year-old municipal wash house: despite efforts to call diverse academic backgrounds (architecture, engineering and biology degrees) to join the teams, most of the participants' experience was on design and architecture. This, and the lack of electronic materials, undermined the proposals involving renewable energy to reach self-sufficiency. In order to overcome this there is a need to target more sponsors and technical engineers as students and mentors.

¹⁸ <https://hubin-project.eu/library/hub-in-framework-overview/>

Yet academics did play some role in knowledge transfer, delivery, partnerships and replication.

For example, **Genoa's** Action 2 "Public Art" featured the "La Via delle Storie" (the "Street of Stories"), implemented by the local Academy of Fine Arts professors and students and involved different arts from painting to digital, decoration, creative writing, etc. In the Hub team's view, the implementation of this Action represented an important form of collaboration between the Municipality and the Academy - thanks to the HUB-IN project, the two institutions signed a framework agreement that, besides allowing for this specific action's implementation, could be the starting point for further future cooperation. The Academy's Professors carried out a relevant co-creation activity with their students from different Departments, heavily involving them both in the co-design and in the implementation phases. In total, 45 students were involved, of which 34 females and 11 males. The experience was so positive for the Academy's professors and students, as well as for the local resident's association (Comitato per Prè), that it will be repeated in the future. In **Braşov's** Action 2 "City as a Classroom", local high schools and university students were an integral part of the Action, forming the cohort of participants who gained skills in urban planning, data analysis, urban furniture prototyping etc (41 students at time of reporting, with more cohorts planned). **Lisbon** involved students in a competition launched in partnership with C40 "Students Reinventing Cities - Mouraria" and "Students Reinventing Cities - Alfama". The competition attracted a large number of students, including representation from international universities, supporting the in-flow of knowledge and ideation into the HUA: the Mouraria competition involved 90 participating students, 23 registered teams, 19 projects presented, 9 international universities, two initiatives that bridged the Hub ecosystem and climate action. The Hub also involved students in Mocathon (more details in "Increased rehabilitation of underused land" above) as well as private, public and community associations. In **Grand Angoulême's** Action 4 "Artist Open Call", an artist who also teaches at university level shared that the trail as a learning format could be a welcome contrast to formal settings, providing a more simple and natural way to engage in dialogue:

*"I would like to find forms of dialogue as simple and natural as on the paths while thinking about the context of encounter. This is **particularly valid for teaching** because I teach comics at university in a very formal setting, and fine arts with a little more attitude."*

**Comic artist and teacher
Caravane Creative Lab, Grand Angoulême**

Community groups formed approximately 20% of organisations - "Increased inclusiveness of key stakeholder groups". This is essential for local ownership, and aligning development proposals with community needs. As community impacts were included in "Expected Impact 2" social indicators, they are not duplicated here.

N.B. the precise % balance of stakeholder groups is not as important as the insights and resources that they can bring to the table, and the buy-in generated that they can take forward to amplify results of the Actions.

Recommendation (embrace barriers as a "call-to-innovation"): in Genoa, response times from the Authority for Cultural Heritage can be up to 120 days from submission of the request. Hence, sometimes designing a Plan B can be useful. It is the case for one of the projects from Action 4 "Experimental Call", where the permissions to install projectors on heritage buildings was denied, and implementers had to find an alternative solution - eventually the implementers overcame this rejection by creating a network with some of the local shops, which ended up hosting the projectors inside their premises, showing the planned images in their shop windows for passers-by to see. In this way, they actually increased the involvement of inhabitants and local businesses in the project, who felt a sense of belonging with it and a strong cultural identity.

Recommendation (engage municipal departments early): Hubs noted that, considering some resistance they encountered with doing Open Call interventions in the public space, they would recommend engaging other departments within the municipality (traffic, permits etc), much earlier in the process to derisk delays to timelines.

Recommendation (establish strong synergies with other on-going initiatives in the area): regeneration programmes, management plans, etc. - it is crucial to ensure the successful delivery of the Hubs and maximise the impact of its actions.

Recommendation (have an “aftercare plan” for public innovations and beware of political unknowns): despite their best efforts, Braşov encountered challenges in donating the Action 2 "City as a Classroom" pretext objects to the Municipality. The administrative challenges add up with the upcoming change in leadership following the current mayor's loss in the election. As a result, they are actively seeking out alternative solutions to guarantee the proper care and management of the objects.

Increased numbers of sustainable HUAs that are creative and using heritage-led regeneration



For the pilot cities, findings are included in the outcomes discussed above and below. There are some successes at neighbourhood level actions, but it is too early and perhaps small scale to now describe the HUA's themselves as fully sustainable and in general using heritage-led regeneration.

For the follower cities that could also become sustainable HUAs that are creative and using heritage-led regeneration, the Academy and Alliance aim at growing cross-city networks and knowledge sharing, but that is outside the scope of this report - refer to WP6 Exploitation materials at <https://hubin-project.eu/library>.

Impacts

Benefits potentially detectable *after* programme timescales.

Increased heritage-relevant regeneration of HUAs and landscapes



This is a medium- / long-term indicator, with results not expected within programme timelines.

The findings, learnings and evidence from “Increased inclusion of environmental sustainability principles into HUA redevelopment” indicate some embedding of principles in the future direction of the HUAs, even if it is too early for downstream results to be measurable.

Increased climate resilience of HUAs



This is a medium- / long-term indicator that may take place over years. As such, HUB-IN does not expect to see measurable change in this during programme lifetimes. Thus, a score of “none yet” with regards to results.

Increased circular economies and processes in HUAs



This is a medium- / long-term indicator that may take place over years. As such, HUB-IN does not expect to see measurable change in this during programme lifetimes. Thus, a score of “none yet” with regards to results.

4.4. EXPECTED IMPACT 4 (ECONOMIC: JOB OPPORTUNITIES AND SKILLS)

“Cross-sector collaboration, creation of job opportunities and skills in cultural and creative sectors and innovative manufacturing linked to historic heritage”

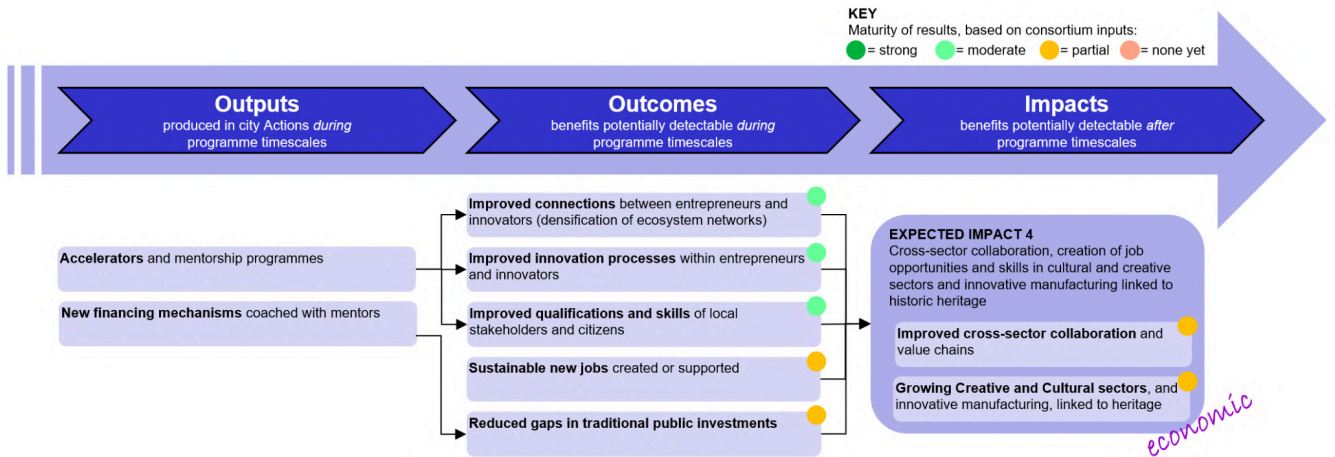


Figure 7: “Expected Impact 4” and consortium scores for results in its component outcomes and impacts

Summary evaluation of results and learnings

Outcomes

Benefits potentially detectable during programme timescales

Improved connections between entrepreneurs and innovators (densification of ecosystem networks) ●

Accelerators that made partnering a formal requirement ensured close collaboration. For example, in **Belfast's** Action 3 "Challenge Call", the co-creation aspect of the project has led to cross-sector collaboration. Each project has at least one formal partner and most have several information partners based on in the HUA supporting and helping to develop projects. In post-Accelerator surveys, all of the six supported entrepreneurs reported “access to partnerships” as a benefit, and all six again the same for “networking (knowledge exchange)”. Interest in partnerships and exploitation is growing, including (non-exhaustive): local tourism operators such as HMS Caroline keen to incorporate some of the prototypes into their offerings; community groups such as St. Joseph's and the Mary-Ann McCracken Foundation exploring further; the National Museum of the Royal Navy's Curatorial and Conservation team using the photographic and 3D model data generated from one of the projects and democratising access of these artefacts to the public; the 3D scanned artefacts being used to identify points of conservation and added to digital archive library; and Titanic Hotel are now hosting one of the apps and in discussion on ways they can use the technology to further enhance the heritage offering for the building.

Entrepreneurs generally ranked networking as one of the highest benefits of the Actions. For example, in **Lisbon's** Action 2 "De-incubator", post-support surveys revealed that the most important benefit they received was “networking that led to knowledge exchange”. Formal partnerships was seen as slightly less important, coming in at fourth out of 11 (sample size of six entrepreneurs). In a similar exercise in **Slovenska Bistrica's** Action 2 "Crouzet Accelerator", “opportunities for networking and knowledge sharing” ranked as the third most important benefit for the four entrepreneurs (out of 12 benefits). It seems the exchange of new knowledge, rather than formal joint partnering, seems to be what drove that valuation, as “access to existing business partnerships” scored second lowest in importance to the entrepreneurs.

As well as opportunities to network, mentoring focussed on networking skills yielded results.

For example in **Utrecht's** Action 3 "Talent Development", a Hub of artists receiving support returned 12 pre- and post- surveys where, amongst other assessments, they self-evaluated their networking skills on a scale of 1 to 5 ("very low" to "very high"). No artists scored their skills as either "high" or "very high" before receiving support - yet 75% did afterwards. **Braşov's** Action 2 "City as a Classroom" focussed on aiding students with discovery rather than enabling organisations to network, and the so coaching was angled more on "talking to people" as part of investigating - 20% of the students rated themselves "poor" at this prior to support, yet 0% rated as "poor" afterwards. In fact the 36% who rated themselves "good" or "very good" before, doubled to 72% afterwards (25 students).

*"I also learned a lot about collaborations. How I normally organise my practice is that I can do everything myself, and that was really not the case with this. **I had to start collaborating, and that is quite new for me.**"*

Artist, Talent Development, Utrecht

Regardless of support offered, not all innovators capitalised on opportunities the same way.

For example, in the co-design of **Nicosia's** Heritage Walks activity, those designing the innovative trails included a historian and a cultural heritage expert (also members of the group "People of Cyprus"), two professional tour guides (members of the Cyprus Tourist Guide Association), a peace educator, an architect, a civil servant, and some members of the non-governmental organisation "Friends of Nicosia". Several reported in post-action surveys that they had built connections and inspirations to replicate what they had learned - but also one voice reported that they did not use the opportunities provided in this manner, even though they knew it was available to them.

*"After the experience at HUB-IN, I can **develop similar actions with other organisations.**"*

Professional Tour Guide, Heritage Walks

*"[Did I experience or create meaningful partnerships?] **I could, but I didn't.**"*

Civil Servant, Heritage Walks

Innovators were not asked to track exactly who or which types of organisations they networked with, as this would not yield insights of a value proportionate to the effort required. However, insights on stakeholders across HUB-IN can be seen in "Increased inclusiveness of key stakeholder groups" above.

Consortium scoring: given that networking often appears highly ranked by innovators as a benefit, and there is evidence of skills increased, this outcome is scored as having "moderate" results.

Recommendation (factor in networking early, by requiring partnerships at Applications stage): if Accelerators, Challenge Funds, Open Calls and other co-creation activities involve innovators applying for funding, the Hub has the option of making partnerships a requirement - the application can feature specific questions on who they are partnering with for the activity, and why. Further directions can be set - for example whether partnerships should be between small and large organisations (skills transfer), between commercial organisations and academic bodies (commercialising research), between organisations and communities (social value), between organisations and public bodies (matched funding), or any other combination. Some programmes even feature international partnerships where two countries (or cities) "twin" on an innovation programme.

Recommendation (play an active role in brokering networking gaps): (continuing the above recommendation) part of the Accelerator's value can also be through brokering matches where there are gaps or challenges for the applicants - for example hosting early-stage pre-Application networking events, or leveraging partnership the municipality has with local universities etc.



The innovation process across Hubs has involved frequent problem solving, for example this was directly a part of **Braşov's** Action 2 "City as a Classroom" where coaching and monitoring focussed on skills in this area, and the fieldwork put it to test, but it was also reported by all cities that they need to adapt to unexpected constraints: from Belfast working around fragmented landowners' interests; to Braşov leveraging soft power to mobilise goodwill in tourist-facing sectors prior to formal regulations; to Genoa overcoming denied permissions to install lighting equipment in the HUA; to Grand Angoulême's finding ways to achieve a "snowball effect" in creative sector attendance in Caravane launch meetings; to Lisbon rethinking the role of the HUB-IN Stamp; to Nicosia provisioning human solutions to hard infrastructural accessibility challenges to its Heritage Walks; to Slovenska Bistrica finding trade-offs between flexibility and focus in the placemaking calls; to Utrecht swiftly mobilising identifying Hub sites once the original site of De Machinerie became unavailable. All required adaptive actions from Hub teams and their governance partners to overcome these and these are just a few examples, more challenges were faced and adapted to at Hub and innovator level.

Part of that problem-solving has been accessing inputs from stakeholders in each Hub - for example related to the issued named above: working groups to align interests; developing soft power built from close engagement; building networks to voluntarily host equipment in the HUA; leveraging word-of-mouth to achieve a snowball effect; redesigning the HUB-IN Stamp action to prioritise development of a digital app; guiding entrepreneurs; and liaising with local creatives to identify Hubs that can scale the interventions - etc. One Hub comments that the most valuable results were indeed the many lessons learned by the implementers; in finding ways to solve all the difficulties they met along the way, they learned new ways of doing things and increased their capacities, often increasing the involvement of inhabitants and local businesses in the project, who felt a renewed sense of belonging with it. More details on co-creation involving representation from communities, public, private sector and academia is described in "Increased inclusiveness of key stakeholder groups" above.

*"Every time you do something new and can really make it happen, it is much easier to move on to something else. After working in steel once, I was **able to immediately start thinking differently**. It's always thinking ahead."*

**Artists,
Talent Development, Utrecht**

Not every attempt at overcoming solutions was a success, failure was part of the learning.

For example, in **Lisbon's** "De-incubator", one of the innovators' research projects was on loneliness - observations were made and shared with colleagues, however during the Accelerator timelines no products or services were ideated that could respond to this problem. Innovators in **Belfast's** Action 3 "Challenge Call" were often using quite advanced technology (AI, Augmented Reality etc) and sometimes came up against the "digital divide": while the prototypes generally received positive feedback, engaging certain user groups, especially older demographics less familiar with digital interfaces, proved more challenging than expected to some entrepreneurs. This highlighted a need for a more tailored approach to user experience design to ensure inclusivity. **Braşov's** Action 1 "Transforming the Public Realm" is facing a loss of its progress in reclaiming public space due to some political uncertainty with local elections. And so on.

*"The various agencies who own/are responsible for different pieces of land along Maritime Mile were extremely difficult to navigate. Due to the **challenges of redesigning the project** and the subsequent managing of people/locations, there was a considerable amount of additional project management time needed in order to deliver the project."*

**Entrepreneur,
Challenge Call, Belfast**

Part of the value reported was actually in confronting limitations in order to overcome them - this applied to hard technical skills such as using steam to bend wood for open call installations, to more business-oriented capabilities.

*"Every time you do something new and can really make it happen, it is much easier to move on to something else. After working in steel once, I was **able to immediately start thinking differently**. It's always thinking ahead."*

*"I have learned a lot in terms of craftsmanship that is completely new to me. There are also people who have a certain form of knowledge, so you have to go there. **You can't read that in a book either. You just have to do that.**"*

**Artists,
Talent Development, Utrecht**

In this way, failures did help entrepreneurs to mature their understanding and simplify ideas

within the constraints they faced, whether finance-based, or time-based or other. For example in **Slovenska Bistrica**'s Action 2 "Crouzet Accelerator", some encountered a limited target audience with the takeaway that workshops are not attractive to everyone, as some people are not interested in cultural heritage, and also that traditional techniques and materials may not be as flexible as modern ones, which can make it difficult to adapt to the latest fashion trends. Several entrepreneurs realised aspects of their original plans were not fit for purpose, and so revised their plans in order to have marketable products with a greater chance of commercial viability.

*"The original idea was to make Bistrica houses completely out of clay, which turned out to be **very time-consuming and difficult to implement**. Throughout the project, the idea was limited to the facades of old, historically important houses in Bistrica, with an added space for candles."*

**Entrepreneur,
"Crouzet Accelerator", Slovenska Bistrica**

*"The final product varies; the change came about due to financial and time pressures. **The final prototype is an optimised, simplified and cheaper version of the original idea**"*

**Entrepreneur,
"Crouzet Accelerator", Slovenska Bistrica**

Hubs also had to adapt due to some significant barriers encountered (lack of critical mass etc).

For example, **Lisbon** faced a lack of a critical number of local applicants: in the case of Action 2 "De-incubator", they had initially planned to scout out innovators and entrepreneurs who mostly lived in the HUA (Colina do Castelo). Although the focus remained on solutions with a social, environmental and heritage impact in the Colina do Castelo area, it was soon realised that the neighbourhoods in this area did not have the critical mass of people with the right profile to join the acceleration programme (a population that was not very entrepreneurial, was ageing or focused on traditional small businesses with little capacity to innovate). There was therefore a need to adapt the methodology and open up the programme to entrepreneurs from other territories. In this new context, a portfolio of national and international entrepreneurs came together and worked collaboratively to respond to local needs. Action 3 "Heritage Pop-Up" and Action 4 "Sprout Tank" also faced unexpected barriers to space: both actions depended on agreements and the granting of spaces by the Municipality of Lisbon in the first case and by the Santa Maria Maior civil parish council in the second. However, it emerged that it wasn't possible to use these spaces, and the actions had to be reformulated. While in the first case, instead of realising the Pop Ups in a single empty building of heritage value, they were transformed into more temporary Pop Ups distributed throughout the territory, in the second case it was possible to exploit a vacant public space of heritage value (Patio do Moca - former municipal washhouse) in the adjacent civil parish of Arroios.

A more expected adaptation has been the use of cultural heritage in innovation processes. The Accelerators and Hubs have variously experimented with heritage ships, community stories, important historical characters, dockworker lives, public squares, painted shutters, public art, architectural sacred

niches, place-based poetry and music, agricultural sites, industrial sites, environmental sites, monuments, traditional foods, traditional ceramics artisanry, Middle Age history, local theatre, historical religion, local aluminium factories, historical house facades, heritage illustrations, local iconography, sculptures and more.

These adaptations of heritage used varying means of technology including Augmented Reality, Mixed Reality, AI, game engine technology, digital sculptures, photogrammetry, sound recordings, volumetric film, 3D holographic experiences, NeRF scanning (extracting 3D information from 2D images), pretext object design kits, digital platforms, open data maps; as well as media such as live performers, guidelines, fiction, comics, photograph exhibitions, interpretive dance, podcasts, experience boxes, film feasts, workshops, social mosaics, public walks, jewellery design, tea-light holders, canvas illustrations, prefabricated pavilions, and other artistic installations.

Innovators reported an overall additionality of HUB-IN. For example, 83% of **Belfast's** Challenge Call innovators reported "we would not have obtained the support with a different provider" (in contrast to receiving the support but of a lower quality, at a late time or with a different provider - all six entrepreneurs responding). In **Grand Angoulême's** Metropolitan Trail pre-launch walks, 97% of respondents discovered at least "some", "many" or "all" places for the first time, and of those 7% of them encountered all the sites for the very first time (30 respondents from the public). In **Nicosia's** Heritage Walks, respondents agree that the Walks have potential for attracting and stimulating visits to the HUA: 3 out of every 4 walkers would not have visited the HUA if the walk had not been happening. Only 25% would have still visited the HUA anyway, 10% would have visited elsewhere in Nicosia (i.e. displacing visits from other parts of the city, 19% would have visited elsewhere in Cyprus, and most of the rest (43%) would have simply stayed at home. The sample size was 99. The four Innovators in **Slovenska Bistrica's** "Crouzet Accelerator" were split between views that the projects would never have developed without HUB-IN's support, or would simply have taken longer. In **Utrecht's** "Talent Development", focus groups revealed mostly positive views that the support could not have been received without HUB-IN, although in one case also that this depends on the types of projects as to whether they can actually access finance. Other Hub actions were by their nature not happening elsewhere, as they were designed by cross-sector co-creation to fill gaps, such as **Braşov's** "Transforming the Public Realm", summer schools and lighting plans, and **Lisbon's** repurposing of unused heritage space in "Heritage Pop-Up" and other actions. **Genoa's** Actions for example were designed to be the cultural counterpart to other physical regeneration programmes ("Caruggi").

*"Without the Challenge Fund's support, **we would not have considered heritage as a potential vertical for the company. This is something we are now factoring into business development and we have been speaking to other museum organisations as a result.**"*

**Entrepreneur,
Challenge Call, Belfast**

*"I don't think I would have done this right away. It would be a matter of **waiting for financing** that makes that possible. Those aren't things I can do on my own, so I might have realised that plan at some point."*

**Entrepreneur,
Talent Development, Utrecht**

Some uncertainties on innovation remain, e.g. navigating property rights at product launch, or registering trademarks, patents etc to secure commercial value. For example in **Slovenska Bistrica's** Action 2 "Crouzet Accelerator" when asked "Have you acquired any intellectual property rights that you would not have without the support of the Accelerator?" all answers were: "No, "No, it might make sense", "?" and "I don't understand". This could be an area to explore in future Accelerators - whether this is a local nuance whereby intellectual property rights are not needed for innovations; whether this is a potential blindspot that needs addressed through targeted coaching; or whether property rights are simply irrelevant to the types of products and services produced.

Consortium's scoring: the problem solving and ideation within Hubs and supported entrepreneurs offers some evidence of local innovation.

Recommendation (minimise admin in any processes, to free entrepreneurs' time for innovation): as one Hub put it "bureaucracy kills innovation", and this was a common experience as actions needed co-created and approved at various different levels and stages. Some entrepreneurs reported feeling daunted by the requirements placed on them, saying "the paperwork is new to me, and I'm really scared of it. It's a learning process". Given the short time and budget constraints also raised in a few places, relieving the time and focus from entrepreneurs may free up some of those resources for the innovation and entrepreneurship activities. How this is done depends on each Hub, whether through coaching modules or mentorship or a buddy system to navigate admin requirements etc.

Recommendation (ensure rules for the safety and security of younger participants): Braşov recognised the necessity of presenting rules for the safety and security of the pupils and students acting in the "City as a Classroom" working group, as their exploratory sessions take place on the streets of the HUA, as well as the practice they will perform when building wooden urban furniture. As well, working with minor pupils raises the risks and more care and attention are needed from the mentors. Similarly, Belfast recognised the need for parents' permission to issue surveys to event participants aged under 18 (user testing, dissemination events etc).

Recommendation (Actions are dynamic and must be able to adapt): Hubs raised that the Action Plan must be a dynamic document with the flexibility to adapt. Although the objectives and expected impact are defined during the design phase of the action plan, it is essential to be able to adapt the initially planned methodologies to the difficulties encountered during the implementation phase.

Improved qualifications and skills of local stakeholders and citizens

Co-creation was generally mentored in Accelerators, and entrepreneurs reported upskilling. For example, in **Lisbon's** Action 2 "De-incubator", about 1 in 5 (19%) of the pre- and post- survey respondents rated themselves as either "low or "very low" (on a 5-point scale from "very low" to "very high") before receiving support, and 0% rated this way afterwards (sample of six). In fact a majority (86%) left the De-incubator rating their skills here "high" or "very high". Their co-created products and services explored interviews and community dinners that open new channels of communication and collaboration between residents and tourists; social curators (cook, tour guide, sculptor, surgeon) merging pieces of tiles with the lives and stories of residents and visitors, giving colour and new meanings to the Social Mosaix; bringing together artists and community to create projects based on the experience of local territory and heritage (material and immaterial); and others. **Slovenska Bistrica** saw similar results in their Action 2 "Crouzet Accelerator", where all four entrepreneurs reported "high" or "very high" skills in "ability to co-create with the community". They did enter the Accelerator with self-assessment scores too though - only one scored "medium" before the support. In **Belfast's** Action 3 "Challenge Call", the entrepreneurs engaged over 600 people in user testing, including from local communities, and gathered 37 "hidden" stories related to the Maritime Mile's unique local cultural heritage. For the process, two entrepreneurs actually decreased their top self-assessment in the pre-survey ("very high" skills) to reassess themselves only as "medium" or "high" in the post-survey. From follow-up liaisons between the Hub team and the entrepreneurs, this is believed due to overoptimistic scoring at the beginning which then needed adjusted once they gained a clearer picture of the reality of "what good looks like". In this way, sometimes an additional benefit on top of increasing skills is actually enabling a reality-check on entrepreneur's self-assessments, by increasing their ability to calibrate their own quality. **Genoa's** methods of co-creation directly stimulated buy-in for replicating the Action: during story collection days, more than 150 people participated as individuals of different ages and backgrounds sat on the decorated seats and each shared a story connected in some way to the HUA, with the students and professors from the Academy of Fine Arts. The experience was so positive for the Academy' professors and students, as well as for the local resident's association (Comitato per Prè), that it will be repeated in the future.

Entrepreneurs also reported advancing in heritage-based innovation skills. Skills in "entrepreneurship and innovation in the field of sustainability", and "entrepreneurship and innovation in the field of cultural heritage" increased in all **Belfast, Lisbon, and Slovenska Bistrica** accelerators - in that the overall blend of self-assessed skills raised from "very low" or "low" or "mid", to "high or "very high". In almost all Accelerators and Open Calls across the eight Hubs, the innovations are too early stage to have attracted revenues, but how heritage was embedded in their outputs can be seen in the Operational Results and

Process Evaluations section of each city's D5.3 Evaluation Report. Any early financial gains are explored in "Sustainable new jobs created or supported" below.

...and the combination of tech and business skills was recognised as important amongst artists, for entrepreneurial success. For example in **Grand Angoulême's** Open Call, there was a focus on leveraging the trail's historical and environmental heritage into product development, within the confines of a time-bound process.

*"We learned how to **make felt the traditional way**. As young artists we also learned to respond to a call for artistic projects within certain deadlines. We had never worked together, which allowed us to **cross-reference our practices**."*

**Sound production
Grand Angoulême's "Artist Open Call"**

Unexpectedly, innovators saw slower growth in skills topics such as PR and finances. This varied by Hub, but in very general terms there are some commonalities across the **Belfast, Braşov, Lisbon,** and **Slovenska Bistrica** innovators where skills around "accessing innovative funding and finance options", "knowledge of fundraising", "knowledge of drawing up a budget", "business and investment pitch" and "financial management and accounting" all saw lower gains than the other skills assessed in pre- and post-surveys. This raises an interesting question on whether these financial pitching topics are simply too far removed from the entrepreneurs' normal passions and day-to-day capabilities for them to feel confident about, or whether they are by nature topics that only give results in the longer-term. For example, none of the six entrepreneurs in **Belfast's** "Challenge Call" left the Accelerator scoring their skills in accessing funding "very high", yet collectively they have attracted £210,000 of funding (about €250,000) in 9 months since the Accelerator began that they rate as either fully or partially attributable to their HUB-IN support.

There are exceptions, with individual artists consciously expressing growth in finance areas, such as some feedback offered in focus groups after **Utrecht's** Talent Development:

*"I also wrote to funds with a kind of better version of the story I'm doing now, to make it even slicker. So **you better understand what a lender is asking for,** what they consider important. A better relationship between applicant and lender."*

**Artist,
Talent Development, Utrecht**

Actions with cohorts of citizens also saw skills increases, such as data collection and analysis.

Students, rather than entrepreneurs, were the focus in **Braşov's** "City as a Classroom", and followed a similar method of assessing their own skills before and after receiving support in workshops and fieldwork, using a simple 5-point scale (from "none at all" to "excellent"). All skills showed an overall increase in scoring between pre- and post-, in identifying problems, doing fieldwork, talking to people, working with maps, giving presentations, understanding different data types, collecting data, teamwork, making sketches, analysing urban spaces, building different objects, knowledge of fundraising and knowledge of drawing up a budget. And same again for knowledge in entrepreneurship, architectural lighting and urban regeneration. In contrast to almost all other skills, the skills in fundraising and budgets had no students at all rating their skills as "excellent" after receiving support - this aligns with the assessments in the entrepreneurial accelerators in other cities described above. This doesn't mean that financial skills are lacking, only that the students seem less confident when compared to other skills.

Students also suggested: more time to experiment, more feedback, broader scope (e.g. including other parts of the city or even other cities in the learning topics. Actions are obviously time-bound, so this request for more could be taken as interest for replicating and or scaling the action. A second edition was launched in 2024 and the Hub team would like the program to be annual. Students could be

followed up with every few years to understand if they have adapted their career path or participation in urban design, and what role the Action may have played

*"[Future workshops should include] the **deepening of mediaeval construction techniques in the historic centre.**"*

*"I would have liked more. Longer more connected routes. **A deeper look** into the life of an architect."*

*"I would have liked the mentors to give us **feedback more often** in the first days."*

**Students,
City as a Classroom, Braşov**

One-off community events have limited skills gain, but some showed *interest* in upskilling. For example, within **Nicosia** five Creative Workshops were organised and implemented offering the public kids workshops ("Drawing myself in Cypriot traditional costumes" and "Traditional patterns - stamped bandanas") and adult workshops ("Engraving workshop for adults", "Laser-cut assembly lamps - from design to fabrication", and "Sounds of Nicosia - an interaction between music & visual arts"). Almost 50 people showed interest and about 35 actually participated in the workshops, including being in more than one workshop.

*"Many of the participants indicated that they should continue the program because **they discovered their own hidden creativity.** They commented and **looked for ways they could work at home on their own.** (They asked to know where one gets the materials and tools they need)."*

**Workshop host / collaborator,
Activations of the Hub, Nicosia**

Some of HUB-IN's techniques may be taken back into academia for dissemination. For example, in **Grand Angoulême**'s "Artist Open Call", an artist who also teaches at university level shared that the trail format could be a welcome contrast to formal settings, providing a more simple and natural way to engage in dialogue. The Academy of Fine Arts wishes to replicate their, and their students', involvement in **Genoa**'s Public Art, as described in "Increased interest and understanding of how to achieve Hubs of Innovation and Entrepreneurship" above.

*"I would like to find forms of dialogue as simple and natural as on the paths while thinking about the context of encounter. This is **particularly valid for teaching** because I teach comics at university in a very formal setting, and fine arts with a little more attitude."*

**Comic artist, teacher,
Artist Open Call, Grand Angoulême**

Recommendation (include modules or mentoring on financing and budgeting): each Accelerator had nuances in their focus and results, but in general the entrepreneurs and students in Accelerator-type actions seemed to progress least in finance-related skillsets. This may be due to lack of experience as they were often fresh innovators, but is a core part of entrepreneurs becoming successful (and also using public funding efficiently), so is worth investigating in the design phase as to what kind of support or coaching is optimal.

Recommendation (target entrepreneurs who are willing to calibrate, as well as grow, their skills): in several Accelerators there were outlier cases of individuals assessing their skills as actually lower after receiving support than before - this is counterintuitive, as it suggests that either the support was such low quality that they regressed in capability, or that they have soberly changed how they assess themselves once they

confronted their limitations. The former is unlikely if the majority of other participants grow positively in the measured skill, and this can be determined through post-support interviews etc. The latter may be likely if the individual was overly optimistic about scoring their capabilities in the pre-surveys - once they score themselves at the top, the only way is down. This latter reason was the case on several Accelerators, and raises a question: could it be that some suitable applicants don't apply to Accelerators because they (erroneously) think they have all necessary skills already? The opportunity to actually calibrate self-knowledge - and thus identify gaps - may be as valuable as the more obvious opportunity to grow skills. This "test your blindspots" aspect could be part of any Accelerator marketing / invitations to apply, as well as the more obvious calls to "grow your skills".

Sustainable new jobs created or supported



Two of the Accelerators reported their entrepreneurs gaining funding or revenues. In **Belfast's** Action 3 "Challenge Call", the entrepreneurs completed in pre- and post-surveys on revenues, investment and funding that they attract that they would attribute either directly and fully due to the HUB-IN support (i.e. would not happen without it), or partially due to the HUB-IN support (i.e. would be a lesser amount, or their experience and evidence on HUB-IN was only one contributing factor to the award and not the deciding one). Over 9 months from Accelerator start until time of reporting, they attracted £210,000 (approximately €250,000), £60,000 of which was attributed "fully" to the Accelerator's support and £150,000 as "partially", per the descriptions above. The figures are then adjusted down by applying some standard economic "adjustment factors" (see Section 3 "Economic, Environmental and Social Impacts" above, and D5.1 "Common Impact Assessment Framework" for details), and making assumptions based on literature reviews for how long benefits of accelerator interventions may last, and at what rate they decay. These assumptions obviously will vary, and widely so, for individual entrepreneurs so following the conservative principle, the lower estimate is used when possible. Depending on these assumptions, the entrepreneurs could see about £212,000 after the next 3 years. Against the municipal budget spent, this represents a ratio of about 1.5 for every £1 spent (N.B. only municipal spend is included in the costs, as there are important caveats in terms of level of depth of modelling appropriate for this project). As the entrepreneurs reported results are highly interim, and early stage inputs apply, the figures from the model are taken as highly exploratory and indicative only. Other assumptions sourced from literature reviews apply. The model looks to answer a hypothetical and early "what if" questions in simple exploratory terms: under the right conditions can commercial benefits from heritage-based innovation exceed the cost to municipalities of the support. By tracking the entrepreneurs' growth over the years, Hubs will be able to gain clarity on ongoing actual economic results, and therefore jobs supported.

Utrecht's Action 3 "Talent Development" also saw some commercial returns due to events and other activities that reached over 9,000 audience members according to the HUB's tracking. Using the same model as Belfast, but measured for a shorter time period, the entrepreneurs reported about €41,000 in revenues and funding after adjusting for tax. Once adjusted for economic effects, this may generate €70,000 generated for the supported artists over the next 3 years. Using sector multipliers from the Netherlands national statistics agency, spend is expected to flow through supply chains and the wider economy, potentially at €141,000. N.B. this early stage and interim view is based on early stage inputs and assumptions, and comes with the same strong caveats as for Belfast above. In reality, Hubs would need to track the supported entrepreneurs' growth over at least one or more years to understand how the changes have bedded in, and what can be attributed to HUB-IN support as opposed to other support or natural trends. See Section 3 "Economic, Environmental and Social Impacts" above for details.

Aside from Euro values attracted, entrepreneurs gave indications of growth in skills and business maturity, as well as networks etc, as described in "Improved innovation processes within entrepreneurs and innovators" and "Improved qualifications and skills of local stakeholders and citizens" above. These are thus exploring the more intangible side of capacity building, knowledge flows etc.

One of the supported entrepreneurs plans to become a start-up based on their experience. In **Genoa**, the "Fair to share" project decided to continue the activity and become a start-up - they are planning to hire two people and capitalise the network built during the HUB-IN project to open several pop-up stores each time in a different place. Some of them are in the pilot area.

For all other Accelerators, the innovators and entrepreneurs are in early stages of developing their product or service, and are not expected to make commercial success within the programme timelines. For some this was also not the focus, innovation was geared towards students or other non-commercial endeavours.

Recommendation (monitor entrepreneurs annually, not just during programme timelines): *start-ups are fraught with risk and uncertainty, and so forecasting economic benefits from a few months of support is inherently subject to large uncertainties. Any findings can only be indicative at best. It is therefore valuable to repeat the post-support surveys at annual intervals, in order to track changes over time. This could be followed up with interviews in cases that need deeper exploration.*

Reduced gaps in traditional public investments

As above, most entrepreneurs are at early stages and not economically sufficient, although some results indicate positive movement as described directly above - €291,000 in gross receipts of funding and revenues (N.B. this is a raw input for economic modelling and is adjusted accordingly via the model in Section 3 "Economic, Environmental and Social Impacts" above).

At Hub-Level, a total of some €837,000 funding was attracted into the Hubs in the form of matched funding for the Actions and future Hub funding. (N.B. some uncertainties remain until municipal budget rounds are complete, see below):

- **Belfast €70,000** (£50,000) from leveraging its networks and evidence to unlock matched funding towards the Waterfront Promenade Framework. This came from a mix of public, private and voluntary organisations (Department of Communities, Belfast City Council, Maritime Belfast Trust, Titanic Quarter Limited, Belfast Harbour, Tourism NI).
- **Utrecht: €642,000**, based on €164,000 contributions from the Entrepreneurs Fund Utrecht and €50,000 from the HUA's owners' collective, both committed to recur annually over the next 3 years, in relation to Action 1 "Supporting the Hub".

Lisbon: €125,000 (potential based on estimates of upcoming funding rounds) comprised of: €25,000 municipal budget estimate for HUB-IN funding in 2025, and €100,000 municipal budget estimate for HUB-IN partners FABLAB and Mouraria Creative Hub.

And HUB-IN has partially helped other projects to secure €84,000 funding by providing evidence and alignment (N.B. this funding does not go to the Hubs, and can not be 100% attributed to HUB-IN, it refers simply to aligned programmes whose funding was partially supported by the local Actions).

- **Belfast: €70,000**, based on "Grey to Green" funding was successful due to evidence in the Waterfront Framework to greenify one side of the bridge gateway to Maritime Mile, and the Waterfront Promenade Framework was also used to leverage funding from the Irish Government for a feasibility study for a bridge on the Maritime Mile.
- **Braşov €14,000**. One of the members in the governance structure (KunStadt) submitted a project for funding from Braşov Municipality and the complementary activities used alignment with the local HUB-IN Actions: multidisciplinary events in the HUA focussed on transforming public spaces into hubs of art and creativity, involving local artists, the community and companies. The project was approved and is being implemented.

Although not all Hubs reached their funding targets, the outcomes described in this section offer some evidence that early foundations are being laid that could support the attraction of funding investment and revenues in the future, by establishing local evidence, networks and opportunities that feed into each other.

"The Framework... created something which all of the stakeholders, the local communities, private sector, public sector, universities etc could coalesce around and say **'this is what we want to invest in to create a bright future'** which balances our communities, nature and economic development".

Joe O'Neill
CEO Belfast Harbour

"**The initial investment in the Hub has caused a flywheel effect**, where financial investments lead to quarterly meetings, a better website etc. which made the Hub more credible, which in its turn made it **more interesting for other stakeholders to invest** in the Hub."

Policy team
Municipality

Impacts

Benefits potentially detectable *after* programme timescales.

Improved cross-sector collaboration and value chains



This is a medium- / long-term indicator that may take place over years. As such, HUB-IN does not expect to see reversals in this during programme lifetimes. However, due to some evidence of networks, knowledge sharing and innovation processes above, a score of "partial" was given with regards to potential results.

Growing Creative and Cultural sectors, and innovative manufacturing, linked to heritage



This is a medium- / long-term indicator that may take place over years. As such, HUB-IN does not expect to see reversals in this during programme lifetimes. However, due to the findings on entrepreneurs skills, and some early findings on revenues and funding, as well as matched funding attracted at Hub level,, a score of "partial" was given with regards to potential results.

4.5. OPERATIONAL KPIS

The Grant Agreement contains some Key Performance Indicators (KPIs) to track the operational scale and reach of the Actions, and these are presented in Table 1 below. As categorised in D5.1 “Common Impact Assessment Framework”, some of the Grant Agreement indicators relate to comms or exploitation activities outside of city impact assessment (e.g. number of participants in the Academy etc) and so are not included in the scope of this document.

Overall, targets for all indicators under Expected Impacts 1 and 2 were met, with the exception of:

- *% of elderly residents engaged in the initiatives for the regeneration of places and people*
This was originally merged together in the Grant Agreement with percentage of women (“% of women and elderly residents engaged in the initiatives for the regeneration of places & people”), but were split out to enable tracking of those separate parts. Based on principles of proportionality and privacy, it was not cost-effective to use Hub teams’ effort for tracking comprehensive personal information of every attendee at every part of each initiative - thus the percentages are taken from events or processes where tracking could be done within the monitoring processes for the Hub’s priority outcomes, and with participant permissions. For purposes of categorisation, “elderly” was taken here to mean people retired / aged over 65. Whilst “% of women” was found to normally exceed the target set of 30-40%, “% of elderly” was more challenging: by definition, some actions specifically targeting working professionals (e.g. some Accelerators), would not include retired and elderly within that target group. This varied by event though - for example there was also a high proportion of older people involved in Belfast’s Challenge Funds (39.6%) which was higher than the Northern Ireland population of over 65 (34%, NISRA 2021 Census data).
- *number of external local projects / programmes linked to the eight HUB-IN pilots for possible cross fertilisation*
This target of 120 projects / programmes actively linked was not met, however there were some successes in cross-fertilisation and resources reported. For example, projects where HUB-IN has at least partially contributed to the successful application for funding, due to providing evidence and momentum:
 - Grey to Green - Belfast City Council’s ‘Grey to Green’ initiative invited the city’s businesses, social enterprises, charities and schools to submit expressions of interest in a fund to support temporary green projects in the city centre. Approximately €30,000 Grey to Green funding was unlocked at least partially due to evidence in HUB-IN’s Waterfront Framework to greenify one side of the bridge, providing a gateway to Maritime Mile.
 - Shared Island Feasibility application. The €9 million initiative supports the development of the all-island bioeconomy in the agriculture and marine sectors.¹⁹ Evidence and networks gained on HUB-IN’s Waterfront Promenade Framework action were used to leverage funding from the Irish Government for a feasibility study for a bridge on the Maritime Mile, contributing to the awarding of approximately €40,000.
 - Complementary funded project: one of the members in the governance structure (KunSTdt) submitted a project for funding from Braşov Municipality and the activities are complementary to HUB-IN. The project was approved and is being implemented, with funding of approximately €14,000.

Projects which HUB-IN entrepreneurs have successfully attracted funding from, where they identify HUB-IN as having at least partially contributed:

- Augment the City challenge call is being developed through the Smart Belfast programme for the creative sector. Project owners have also been signposted to learnings, other initiatives and funding that are relevant to the creative industry sector.

Projects that have spun out of HUB-IN Actions to become a new start-up

- Fair to Share: the project was part of Genoa’s Action 4 “Developing and Running an Experimental Call for Innovators”, which aimed to create a temporary shop in the HUA for artisans and small businesses, and also to set up a Training Academy to build their capacities.

¹⁹ <https://www.daera-ni.gov.uk/news/ministers-muir-and-mcconalogue-launch-eu9-million-shared-island-funding-call>

Overall, targets for all indicators under Expected Impacts 3, 4 and Transversal Impacts were met, with an exception on finances: “Expected financial leverage to ensure the HUB-IN pilots’ activities beyond the project lifespan (euros)”. This proved a challenge for the Hubs in terms of attracting enough funding or investment to maintain operations as a Hub in the future. Thus, commercial sustainability remains an open question.

As described in Section 3.1 “Economic Impacts”, a total of some €837,000 funding has been attracted into the Hubs in the form of past matched funding and future Hub funding, albeit with some uncertainties remaining until municipal budget rounds are complete:

- Belfast €70,000 (£50,000) from leveraging its networks and evidence to unlock matched funding towards the Waterfront Promenade Framework. This came from a mix of public, private and voluntary organisations (Department of Communities, Belfast City Council, Maritime Belfast Trust, Titanic Quarter Limited, Belfast Harbour, Tourism NI).
- Utrecht: €642,000, based on €164,000 contributions from the Entrepreneurs Fund Utrecht and €50,000 from the HUA's owners’ collective, both committed to recur annually over the next 3 years, in relation to Action 1 "Supporting the Hub".
- Lisbon: €125,000 (potential figures, based on estimates of upcoming funding rounds) comprised of: €25,000 municipal budget estimate for HUB-IN funding in 2025 and €100,000 municipal budget estimate for HUB-IN partners FABLAB and Mouraria Creative Hub.

For some other Hubs, they note that their actions have been focussed on improving social inclusivity of the public realm, and the primary mechanisms have included leveraging success via soft power, mentoring, networking etc, rather than attracting financial investment to meet a monetary target. However, plans are beginning to mobilise in this area together with the partners in their governance structures, and the Hub teams are making efforts to find funding for the next editions of the Accelerator. Likewise for their entrepreneurs supported in the Accelerators and other Actions, they note that some are currently still in their infancy, testing rather than commercialising products and services yet.

EXPECTED IMPACT 1

Reversing trends of abandonment and neglect of historic heritage in urban areas and landscapes

	Direct / indirect	Target scope	Target	Target per city	Belfast	Braşov	Genova	Grand Angoulême	Lisboa	Nicosia	Slovenska Bistrica	Utrecht	Total	Average
Number of Local Associations and Local Community Groups committed with HUB-IN at the local level from each HUB-IN pilot	Direct (ST)	per city	10 - 15	10 - 15	22	12	20	52	12	15	28	10	171	21
Number of initiatives designed and developed in the eight HUB-IN pilots that contribute to co-creation, community development and placemaking	Direct (ST)	all cities	15 - 20	2 - 3	3	3	4	4	4	4	3	4	29	3.6
Number of local stakeholders participating in the co-creation workshops to co-design the tailored roadmaps	Direct (ST)	per city	25 - 35	25 - 35	36	59	35	27	42	26	16	36	277	35

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

	Direct / indirect	Target scope	Target	Target per city	Belfast	Braşov	Genova	Grand Angoulême	Lisboa	Nicosia	Slovenska Bistrica	Utrecht	Total	Average
Number of local stakeholders participating in the development of HUB-IN pilot Action Plans	Direct (ST)	per city	25 - 35	25 - 35	246	15	15	93	26	28	22	23	468	59
% of women engaged in the initiatives for the regeneration of places and people	Direct (ST)	per city	30 - 40	30 - 40	68%	62%	59%	63%	67%	77%	77%	79%	NA	69%
% of elderly residents engaged in the initiatives for the regeneration of places and people	Direct (ST)	per city	30 - 40	30 - 40	40%	3%	4%	6%	5%	7%	5%	NA	NA	10%
Number of external local projects or programmes linked to the eight HUB-IN pilots for possible cross fertilisation	Direct (ST)	all cities	120	15	7	4	7	6	7	3	2	7	43	5.4

EXPECTED IMPACT 3														
<i>Boosting heritage and culture-relevant innovation, creativity, entrepreneurship and light 'reindustrialisation' of HUAs and cultural landscapes</i>														
	Direct / indirect	Target scope	Target	Target per city	Belfast	Braşov	Genova	Grand Angoulême	Lisboa	Nicosia	Slovenska Bistrica	Utrecht	Total	Average
Number of ideas or solutions explored during the Accelerator programs in the eight HUB-IN pilots	Direct (ST)	all cities	25 - 30	3 - 4	6	30	19	29	12	6	4	13	119	14.9
Number of SMEs supported to offer solutions or services related with the three strategic clusters of activities	Indirect (LT)	all cities	20 - 30	3 - 4	6	41	8	29	8	6	4	7	109	13.6
EXPECTED IMPACT 4														
<i>Cross-sector collaboration, creation of job opportunities and skills in cultural and creative sectors and innovative manufacturing linked to historic heritage</i>														
	Direct / indirect	Target scope	Target	Target per city	Belfast	Braşov	Genova	Grand Angoulême	Lisboa	Nicosia	Slovenska Bistrica	Utrecht	Total	Average
Number of products or services developed during the Accelerator programs for the eight HUB-IN pilots	Direct (ST)	per city	10 - 15	10 - 15	6	11	4	29	5	6	4	13	78	9.8
Transversal KPI's for HUB-IN Impacts														
	Direct / indirect	Target scope	Target	Target per city	Belfast	Braşov	Genova	Grand Angoulême	Lisboa	Nicosia	Slovenska Bistrica	Utrecht	Total	Average
Expected financial leverage to ensure the HUB-IN pilots' activities beyond the project lifespan (euros)	Indirect (LT)	all cities	€ 8,000,000	€ 1,000,000	€ 250,000	€ 0	€ 0	€ 0	€ 125,000	€ 0	€ 0	€ 642,000	€ 1,017,000	€ 127,125

Table 1: city results for operational monitoring indicators from the Grant Agreement. Source details in the Appendix.

4.6. FUTURE MONITORING / BENEFITS REALISATION

The HUB-IN programme ends in early 2025, and with it the formal requirements for monitoring. The programme's monitoring reports are based on data available at a suitable "snapshot in time" a short period prior to its conclusion, to enable evaluation. Though the programme will no longer have any formal impact assessment after it completes, this does not prevent evaluation continuing in the HUAs.

Monitoring plans are replicable by the cities in future years should they wish, or at regular intervals, in order to evaluate changes since the first "pre-" baseline or to compare with the first version of any replicated Actions. For example, annual follow-ups to the entrepreneur pre- and post-surveys on revenues, jobs, skills, networks etc, and similar approaches in other relevant Actions. This continuation of monitoring depends on each city's appetite, as well as relevance of the monitoring plans after considering how the Actions have evolved, and whether any substitutions or additions are needed to accommodate emerging needs of investors, decision-makers and beneficiaries. Cities may therefore want to stay adaptive and refine their monitoring needs as Actions, Hubs and HUAs evolve.

5. APPENDIX

5.1. SPOTLIGHTS: SPECIFIC CITY ASSESSMENTS

The below city spotlights are a few pages each taken from their monitoring reports, for the purposes of illustrating deeper dive examples of their findings in different Actions. A few of the pages are also referenced in the body text above, but are also included here as part of the city's broader findings and narrative.

N.B. each city conducts more evaluations than the snapshot presented here - see their D5.3 Evaluation Reports at <https://hubin-project.eu/library> for more findings and context.

5.1.1. Accelerator economics (Belfast)

(Continues on next page).

ACTION 3: DEVELOP AND LAUNCH A CHALLENGE FUND (OPEN CALL)

Key metadata

Action theme	Accelerating Programmes / Challenge Calls Placemaking
Action clusters	Cultural and Creative Industries New Lifestyles Resilient and Human Connected Places
Expected outcomes <i>(city level)</i>	Increased skills and business growth for the supported entrepreneurs
Expected impacts <i>(programme level)</i>	1: reversing abandonment and neglect of historic heritage (cultural) 2: new blueprints for regeneration with enhanced wellbeing and quality of life (social) 3: boosting heritage-relevant innovation in HUA's and cultural landscapes (environmental) 4: cross-sector collaboration, job opportunities and skills (economic)



Operational results

The Challenge Fund led to six projects using the Maritime Mile as a living testbed for blending historical heritage with digital technology. In April 2024, all six projects completed their co-creation and user testing activities with local communities, the general public and key stakeholders. 13 applications were made of which six were successful and awarded £20,000. Seven innovative prototypes were developed across a range of different locations on the Maritime Mile. These prototypes use the following technology:

- AI
- mixed Reality
- 3D scanning
- 3D virtual reality rooms
- WebXR
- 3D animation
- digital sculpting
- AI-driven verbal art
- photogrammetry
- NeRF scanning
- Unreal Engine
- 3D creation software,
- immersive augmented reality
- 3D holographic experiences

Over 250 people engaged with the projects through co-creation, user testing or engagement with the end prototype in the public realm. Each had a formal partner but there were 17 organisations involved in total. Final reports were submitted by each project as well as a final interview taking place. Each project will take part in the EHOD (European Heritage Open Day) event in September 2024.



Aura / Voyage to the Past

Augmented Reality experience highlighting the heritage of the HMS Caroline in three key aspects: Inside the HMS Caroline; Outside HMS Caroline; At Home



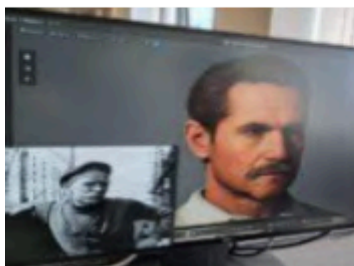
Big Telly

Live trail with mixed reality use and AI interactions. Aiming at community spirit; reframing shared memory; creating common experience; cultural preservation.



Flax & Teal

Visitors scan QR codes around the HUA and access immersive experiences and stories rooted in the area's past via their smart device.



Maritime Echoes

Game engine technology enables users to engage in live, real-time conversations with AI-powered historical characters, asking them about their life and experiences.



Memory Anchors

Interactive digital sculpture and storytelling: AI-driven verbal art, photogrammetry, sound recording and storytelling to capture memories and stories to create immersive art pieces



Ulster Touring Opera / Yardman's Trail

Augmented Reality app bringing locations to life through volumetric film - visitors can experience local residents telling their stories about the areas where many Harbour's dockworkers lived.

Figure 8: the six successful applicants to the Challenge Call

Outcome: Increased attractiveness as a place for entrepreneurs to locate and invest

Knowledge

The six supported entrepreneurs reported growth in key skills such as innovating with heritage and the environment, business models and prototyping.

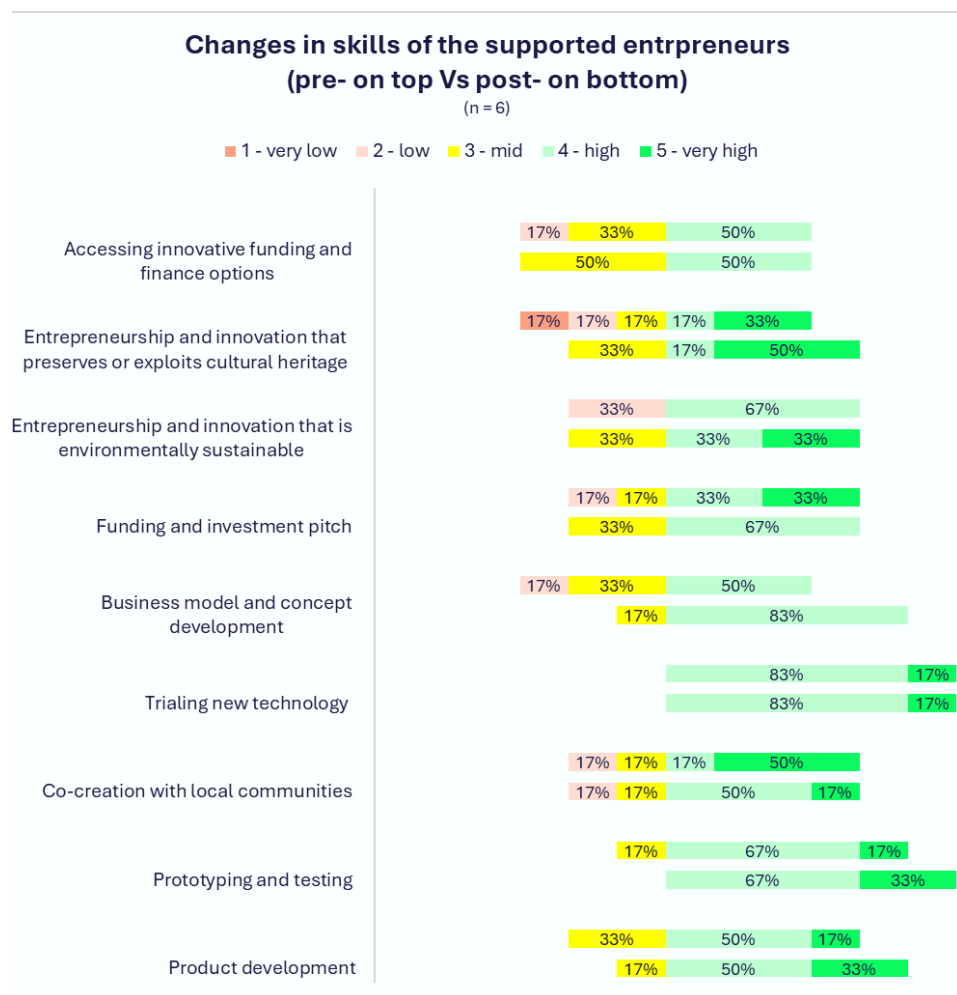


Figure 10: changes in skills of the supported entrepreneurs (pre- and post- self-reflection)

Unlocking the Maritime Mile as a testbed is how this Action intends to make the HUA more attractive to entrepreneurs. Thus, crucial to increasing its attractiveness is its ability to help entrepreneurs develop skills in prototyping heritage-based innovation, and maturing their business.

Overall, the changes in the entrepreneurs skills are positive, based on pre- and post- Action surveys to the 6 participating entrepreneurs / organisations whereby they evaluated specific skills on a scale of 1-5 (1= very low; 5 = very high). The biggest gains were seen in skills related to:

- *Entrepreneurship and innovation that preserves or exploits cultural heritage*: prior to the support, two entrepreneurs rated their skills either Low or Very Low. After support, no entrepreneurs scored this way: all had moved to Mid, High or Very High. See Appendix 4.3 “Case Studies” for the roles that culture played in the innovations.
- *Business model and concept development*: likewise some doubts on their skills prior to support, but following the coaching three of them increased their scores until four out of six score High.
- *Entrepreneurship and innovation that is environmentally sustainable*: the majority (4 out of 6) entrepreneurs increased their skills in this area, which links well to the environmental focus of Action 1 “Waterfront Promenade Framework”.

*“My abilities in **product development and trailing new technology were particularly strengthened**, reaching a very high level as I effectively used cutting-edge tools. My engagement in co-creation with local communities and prototyping and testing were also high.”*

*“From all this, my experience has not only broadened my skill set but also **prepared me well for future projects**”.*

Participating entrepreneurs

Other skills saw mixed results or limited growth, suggesting that entrepreneurs may need further support in or opportunity in developing them, or tweaks in future approaches. These include:

- *skills around funding and financing*
There was mixed change in how entrepreneurs rated their *ability* to capitalise on innovative funding and financing options, as well as making funding and investment pitches. However, some of the entrepreneurs have gone on to attract funding, and they view their experience on HUB-IN as partially contributing to this success. See details below.
- *“Co-creation with local communities”*
Perhaps relatedly, one organisation did rate its perception of their brand’s visibility on the Maritime Mile as Low.

*“Skills in areas such as business model and concept development, customer discovery, and funding and **investment pitches remained at an average level**, demonstrating consistent competence while indicating potential for further growth.”*

Participating entrepreneur

Outcome: Increased attractiveness as a place for entrepreneurs to locate and invest Support organisations

All entrepreneurs benefited with improved access to partnerships and networking that lead to knowledge exchange or further partnership opportunities. Most reported benefits with *access to funds* (access, in distinction to skills in funding and investment pitching in Figure 10 above) The only expected benefits that did not materialise by the end of the Action were increasing access to staff talent and formal training. Based on the scores, only half gained new ways of working so if that is a focus for future replications or scaling of the action, it could be an area to investigate.



Figure 11: number of entrepreneurs reporting specific benefits

Outcome: Increased attractiveness as a place for entrepreneurs to locate and invest

Interim Valorisation of Heritage as an Asset (Indicative)

Four of the six entrepreneurs attracted funding due to participating and showcasing in the Challenge Fund, modelled below (it is still early stages as the current assessment period is in months rather than years). Heritage is occasionally viewed as a liability from a funding viewpoint: something in which intrinsic value is recognised but can not be unlocked easily, or at least not without significant expenditure by municipalities. These interim findings from the Challenge Fund are not intended to give certainty on exact figures, but rather to simply to explore indicatively whether local heritage *has potential* as a revenue-driving asset. The benefits model on the following pages is structured using common elements in economic impact assessments - a brief overview is given here as context (see document D5.1 “Common Impact Assessment Framework” for more):

ENTREPRENEURIAL RESULTS (INTERIM)

SME RESULTS >

The supported innovators track and report changes to key metrics related to business growth (e.g. turnover, investment and funding) during and directly related to the intervention.

N.B. benefits can be subject to incubation periods - e.g. growing a customer base, building revenue channels, winning funding applications etc can take months and more. Ideally these could be tracked for at least a year and then annually. In HUB-IN timelines the periods are less than one year, so the findings are interim evaluations of early results, indicative only.

Application to the Action

SMEs reported £60,000 gained in funding that was “fully” attributable to the support, and £150,000 “partially” attributable (i.e. the support increased the likelihood or amount).

ADJUSTMENT FACTORS >

Reported benefits next need adjusted to account for whether benefits spill out of the intended target area or beneficiaries (“leakage”); compensate a loss elsewhere within a firm (“substitution”); compensate a loss elsewhere within the target area (“displacement”); or would likely have happened anyway from other support programmes or trends affecting the same beneficiaries (“deadweight”). They may also need to be normalised in terms of tax, such as figures including or excluding VAT to enable comparison. For fuller definitions see D5.1, only a summary is given here.

Surveys and Hub liaison with the innovating SMEs provided intel on appropriate adjustment factors. The Hub’s selection process can minimise leakage and substitution by its design.

POTENTIAL FUTURE ECONOMIC IMPACT

EXTRAPOLATIONS >

Benefits are then extended to account for the likelihood of continuing for a period after the support ends (“persistence”). For example, skills gained in training may be retained after the training ends. Although benefits from any given intervention continue, they are expected to diminish over time (“decay”). Future benefits are discounted (“social rate of time preference”) to reflect their lower present value. Comparisons of adjusted benefits to the municipality’s costs can be made (“ratio to budget”). N.B. not all costs and benefits are in scope, the figure is indicative and interim only.

A conservative assumption is made that the Action’s benefits may persist at the lower end of literature review ranges (3 years). Post-HUB-IN monitoring may reveal the actual persistence.

MULTIPLIERS >

Increased turnover for a firm means output is increased, and part of that increase requires purchasing additional inputs from their supply chain (“indirect effect”). It also requires staff who will spend part of their salaries in the wider economy (“induced effect”). Thus, increases in turnover flow through the wider economy beyond the original increase. National statistics agencies provide sector-specific “multipliers” to model these indirect and induced effects.

The revised benefits can be compared to the municipality’s costs in a “ratio to budget”.

Northern Ireland Statistics and Research Agency provides multipliers for the creative sector - for a £1 increase in output, the effect is £0.53 in supply chains, and £0.79 in the wider economy.

GROSS VALUE ADDED

Total output is a key metric for firms as the turnover generated can support jobs. However, it does not measure value created, as part of the turnover goes to purchasing from supply chains rather than new value-adding activity. Instead, “Gross Value Added” (GVA) is a measure that takes the final value of goods and services produced but subtracts the intermediate cost of inputs used in their production. This helps to understand the value created.

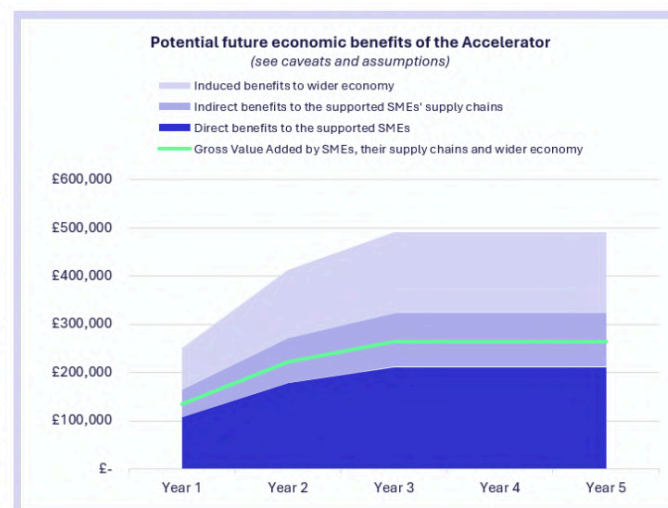
The revised benefits can be compared to the municipality’s costs in a “ratio to budget”.

Northern Ireland Statistics and Research Agency provides tables modelling the outputs and intermediate consumption in the national economy, with a GVA-to-turnover ratio of 0.54.

Based on early results, £1 of municipal cost may unlock £1.5 of benefits to the SMEs and £3.4 to the economy beyond the HUA - N.B. important caveats and limitations apply. The model is shown below. If benefits persist for 3 years per literature reviews (assumptions and sources below), then the SMEs may be expected to attract approximately £212,000 due to the support, after adjusting for displacement effects etc (see row P below). This could generate a further £112,000 for supply chains and £168,000 for the wider economy outside the HUA (rows T and U). These are presented in turnover terms as this is relevant to supporting jobs. As with any industry, the actual new *value added* to the whole economy is a smaller proportion: the Gross Value Added stimulated may be approx. £265,000 (about £1.8 for every £1 of municipal spend) (rows Y and Z).

Entrepreneurial results (interim)

Benefit type	Source / calculation	Fully due to the support received by the Challenge Fund	Partially due to the support received by the Challenge Fund	Total
BUDGET				
A	Budget for the Action from the Municipality only (incl VAT)			£ 144,000
B	Budget for the Action from the Municipality only (incl VAT)			£ 144,000
SME RESULTS				
C	revenues	£ -	£ -	£ -
D	investment	£ -	£ -	£ -
E	funding	£ 60,000	£ 150,000	£ 210,000
F	Direct benefits to the supported SMEs (interim)	£ 60,000	£ 150,000	£ 210,000
SME RESULTS ADJUSTED				
G	leakage			NA
H	substitution			NA
I	displacement			NA
J	deadweight			NA
K	Direct benefits to the supported SMEs (interim) (adjusted)	£ 34,375	£ 46,875	£ 81,250



Potential future economic impact

SME RESULTS ADJUSTED AND EXTRAPOLATED					Year 1	Year 2	Year 3	Year 4	Year 5	Total
L	extrapolate period to 1 year	Assessment period (9 months)	1.3	1.3						
M	persistence	Literature review	3 years	3 years	100.00%	100.00%	100.00%	0.00%	0.00%	NA
N	decay	Literature review	linear	linear	100.00%	66.67%	33.33%	0.00%	0.00%	NA
O	social rate of time preference	HMT Green Book	3.5%	3.5%	100.00%	96.62%	93.35%	90.19%	87.14%	NA
P	Direct benefits to the supported SMEs	$K \cdot L \cdot M \cdot N \cdot O$			£ 108,333	£ 69,780	£ 33,710	£ -	£ -	£ 211,823
Q	Valorisation-to-budget ratio*	P/B								1.5
SME RESULTS ADJUSTED, EXTRAPOLATED AND MULTIPLIED TO WIDER ECONOMY										
R	indirect effect	NISRA	0.53	0.53						
S	induced effect	NISRA	0.79	0.79						
T	Indirect benefits to the supported SMEs' supply chains	$P \cdot R$			£ 57,446	£ 37,002	£ 17,875	£ -	£ -	£ 112,323
U	Induced benefits to wider economy	$P \cdot S$			£ 85,806	£ 55,270	£ 26,700	£ -	£ -	£ 167,776
V	Direct, indirect and induced benefits	$P + T + U$								£ 491,923
W	Valorisation-to-budget ratio*	V/B								3.4
SME RESULTS ADJUSTED, EXTRAPOLATED, MULTIPLIED TO WIDER ECONOMY AND CONVERTED TO GVA										
X	Ratio of Gross Value Added to turnover	NISRA	0.54	0.54						
Y	Gross Value Added by SMEs, their supply chains and wider economy	$V \cdot X$								£ 264,848
Z	Valorisation-to-budget ratio*	Y/B								1.8

Table 3: entrepreneurial results and potential future economic impacts. Prices are £2023/24. N.B. interim and indicative only - see caveats and assumptions.

Other scenarios are possible, as the accuracy of potential impacts may vary as data and assumptions are refined over time - for example if the benefits extends to 5 years, as with some interventions (see assumptions and sources below), then there may be approximately £311,000 of direct benefits to the supported SMEs and £722,000 when including supply chains and the wider economy (see chart “mid” below). If the benefits then also only decay at 10% per year, as per some literature, then the SMEs may have over £408,000 in direct benefits (see chart “higher” below). Importantly, the nature of the support affects how much can be attributed to it - the SMEs should be able to develop profitable heritage-based innovations but not at the expense of being *less* profitable in other areas of their operations (substitution) or duplicating other support programmes (deadweight), otherwise the SMEs’ benefits may be lower than what the municipality spends on the intervention (see chart “low” below).

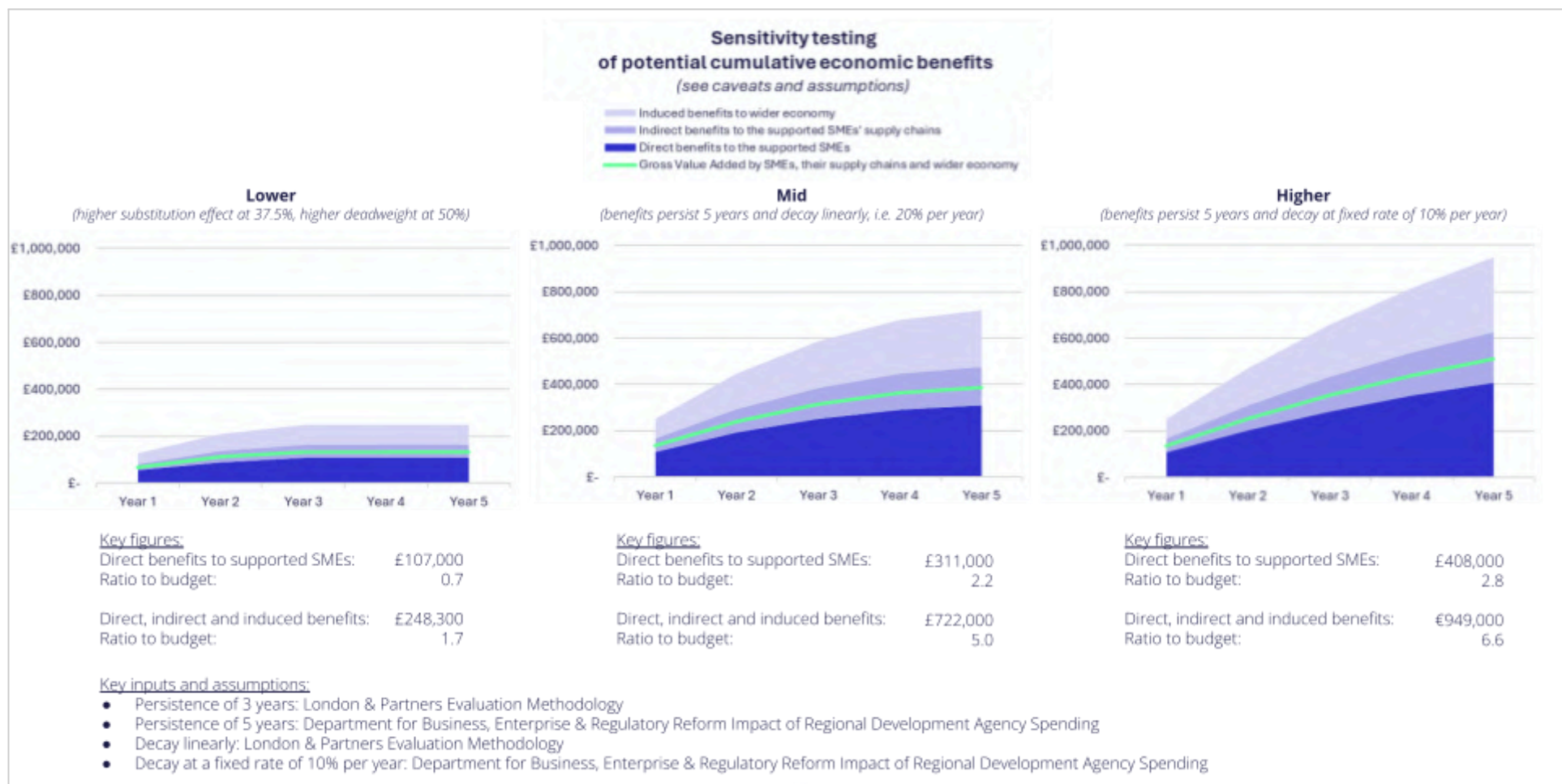


Figure 12: sensitivity testing of potential cumulative economic benefits (approximate rounded figures only, see caveats and assumptions)

Assumptions are noted here, and ones with low data confidence (e.g. because it is too early for medium-term results etc) are considered in the sensitivity tests above.

Assumptions on adjustment factors	Data confidence
Leakage: expected minimal due to the intervention design, because the Action has a dedicated approval process to select only CCI entrepreneurs in the HUA and a training offering precisely focussed on embedding heritage into products and services.	High
Substitution: expected minimal because the training should foster skills in heritage-based innovation, and not at the expense of becoming less skilled in other business processes. The “lower” sensitivity test considers the results if there is “some” substitution (in the London & Partners evaluation methodology referenced in the D5.1 Common Impact Assessment Framework, options range from “None at all” to “All”, with corresponding values of 0%, 12.5%, 37.5%, 62.5%, 85.5%, 100%).	Low
Displacement: considering whether SME success would simply displace revenues from competitors, most SMEs were unsure of whether they had or would have competitors, but the median survey response for those who did estimate was “some” (in the appendix evaluation methodology this is a reduction of 37.5%).	Med
Deadweight: surveys asked the SMEs if they could have received the same support in the same time frame with a different provider; or simply at a later date; or simply of a lower quality; or not at all from any other provider. In the evaluation methodology followed, each response is assigned a percentage value from 0% to 100% deadweight. The weighted average of responses is 8.3% - this value is used for benefits “fully” attributable to HUB-IN. Benefits “partially” attributable to HUB-IN by their nature have at least some other causes at play, and so are given a value of 50%. The “lower” sensitivity test considers the results if benefits that the SMEs take as “fully” due to HUB-IN were in fact partially due to other causes as well, and given a value of 50% per the evaluation methodology referenced.	Med
Assumptions on extrapolations	Data confidence
Persistence: assumption that the longevity of improved benefits from skills, networks, knowledge, attractiveness to funders and financiers etc is at least as comparable to the longevity of job creation from other interventions. We use the same proxy (3 years) as London & Partners do in their city incubator evaluations, which already takes the lower end of an estimated 3-5 year range. ^{20 21} Longer persistence (5 years) is considered in the “mid” and “high” sensitivity tests.	Low
Decay: assumption that decay of skills, networks, knowledge, attractiveness to funders and financiers etc is at least as comparable to the decay of job creation from other interventions. We use the same conservative proxy (linear) as London & Partners do in their city incubator evaluations. Slower decay rates (10% each year) are considered in the “high” sensitivity test.	Low
Social rate of time preference: national governmental bodies often set the standard rates for discounting to be used when considering future benefits and costs. In the UK, HM Treasury gives guidance to use a general discount rate of 3.5%, composed of annual per capita growth of consumption, elasticity of marginal utility of consumption, and pure time preference and risk.	High
Multipliers are derived from Northern Ireland Statistics and Research Agency’s (NISRA) “input-output” tables ²² and the “Creative, arts and entertainment services and libraries, archives, museums and other cultural activities” sector chosen as the most relevant sector to the SMEs and HUB-IN’s focus.	High
Other assumptions	Data confidence
Based on consultation with economists, VAT is included in the economic benefits and the intervention’s budget, so that a like-for-like comparison can be made (i.e. both are treated equally in terms of the influence of tax). The purpose is to enable a comparison of market values of where that budget could be spent. SME gains in investment and funding are treated as equivalent to revenues for the purposes of impact assessment on the assumptions that these are a proxy for future market demand (revenues) and that they are treated as working capital by the SMEs (i.e. spent in supply chains and staff wages, and thus also subject to cross-sector multipliers etc). Successfully attracting funds and investment is also perhaps part of an important “flywheel effect” - entrepreneurs can use their outputs as a further evidence-base to attract further economic resources. .	Med

Table 4: assumptions used to assess the potential future economic impacts

²⁰ https://files.londonandpartners.com/l-and-p/assets/evaluation_methodology_2021.pdf

²¹ <https://webarchive.nationalarchives.gov.uk/ukgwa/20090609050004/http://www.berr.gov.uk/files/file50735.pdf>

²² <https://www.nisra.gov.uk/publications/ni-economic-accounts-project-2018-and-2019-experimental-results>

Some limitations apply due to the interim stage and data availability - the figures above are indicative only and to be interpreted with caveats. The purpose of this model is not a finalised investment-level business case, but an interim and early exploration to understand if there is local potential for “heritage as a revenue-driving asset”. Annual data collections and modelling can be taken further by pilot or follow city Hub teams in future if they have appetite, budget and capacity. Limitations include:

- *remote monitoring of the entrepreneurs*
Hub teams collect data to inform the adjustment factors (from surveys and focus groups etc). The remote nature of monitoring may make it difficult to verify data, as there are many “links in the chain” of data collection (from Work Packages to city teams to Open Call organisers to applicant organisations to staff respondents, etc). An annual assessment of SME revenues was not feasible due to timelines being less than one year, and any auditing by third parties is not feasible for this scale of intervention or monitoring scope. Thus, monitoring relies on self-reported data from the SMEs. Although this can be subject to errors in perception, it is at an appropriate level to understand the overall benefits potential and direction of travel.
- *non-exhaustive figures:*
The figures in Table 3 above are based on available data to date, yet there may be other benefits and costs not available in that data set. E.g. additional social value of the heritage-products fostering a deeper sense of place and connection, or contributing to the future frequency of visits to the HUA, etc. And additional costs from other actors outside of the municipality who may donate time, equipment or services due to flywheel effects unlocking wider contributions. If future cities have the appetite, budget and access to researchers, they could measure these in future replications of the Actions.
- *timelines less than 12 months*
Benefits can be subject to incubation periods - e.g. growing a customer base, building revenue channels, winning funding applications etc can take months and more. The period of HUN-IN support assessed is less than 12 months. This is not long enough for annual or multi-year pre- and post- comparisons of business accounts to reveal medium-term changes in turnover, exports, jobs etc. As the surveys found, the value of the HUB-IN support lies in establishing the business foundations that enable and support future growth. Ideally these could be tracked for at least a year and then annually, and the Hub has tools to monitor growth annually post- programme in the future.
- *(benefits) ratio to budget*
Given the limitations above, standard phrases such as “Benefits Cost Ratio” or “Return on Investment” are avoided because these have a specific usage. At this early stage of evaluation, it is not meaningful to reduce all analysis to one number - this would give excessive dependance on such value numbers which need to be contextualised in the commentary above. A “ratio to budget” is provided, to indicate the scale of interim benefits to municipal costs only, to reflect the interests of Follower Cities’ municipal teams exploring the potential to catalyse creative hubs and “flywheel effects” that attract wider resources into the area.

Key external inputs include:

- Persistence of 3 years: London & Partners, Evaluation Methodology (used for SME support programmes to account for adjustment factors as referenced in D5.1)²³
- Persistence of 5 years: Department for Business, Enterprise & Regulatory Reform Impact of Regional Development Agency Spending²⁴
- Decay linearly: London & Partners, Evaluation Methodology²⁵
- Decay at 10% per year: Department for Business, Enterprise & Regulatory Reform, Impact of Regional Development Agency Spending²⁶
- Social Rate of Time Preference: HM Treasury, The Green Book (2022)²⁷
- Multipliers: NISRA, NI Economic Accounts Project²⁸

²³ https://files.londonandpartners.com/l-and-p/assets/evaluation_methodology_2021.pdf

²⁴ <https://webarchive.nationalarchives.gov.uk/ukgwa/20090609050004/http://www.berr.gov.uk/files/file50735.pdf>

²⁵ https://files.londonandpartners.com/l-and-p/assets/evaluation_methodology_2021.pdf

²⁶ <https://webarchive.nationalarchives.gov.uk/ukgwa/20090609050004/http://www.berr.gov.uk/files/file50735.pdf>

²⁷ <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government/the-green-book-2020>

²⁸ <https://www.nisra.gov.uk/publications/ni-economic-accounts-project-2018-and-2019-experimental-results>

Outcome: Increased attractiveness as a place for entrepreneurs to locate and invest Marketplace / Demand

Examples from the entrepreneurs indicate growing interest in partnerships and exploitation.

Some (non-exhaustive) examples include:

Local tourism operators, such as HMS Caroline, keen to learn about incorporating the prototype into their offerings.

Community groups such as St. Joseph's and the Mary-Ann McCracken Foundation have indicated interest in exploring the project further.

National Museum of the Royal Navy's Curatorial and Conservation team can use the photographic and 3D model data generated from one of the projects, democratising access of these artefacts to the public. The 3D scanned artefacts are being used to identify points of conservation needed on certain items, alongside now being a part of their digital archive library.

Titanic Hotel are now hosting one of the apps, in discussions for ways that they can use the technology to further enhance the heritage offering for the building.

Public sector entities like Belfast City Council and the Maritime Belfast Trust were identified as highlights by entrepreneurs, citing their expertise and resources as invaluable in providing access to community events and local networks. These partnerships not only enhanced the project's outreach but also ensured that the content was culturally accurate and authentically represented the local heritage.



*"Our work on 'Voyage AR: HMS Caroline' has **led directly to further client contracts**, due to the technological **innovation that we are able to showcase** and demonstrate with this AR mobile application prototype. Furthermore, our discussions with our community partner have also identified **organic interest marketing** and business inquiries that they have received from the creative and marketing industries as a result of our prototype development, and by extension, the HUB-IN Challenge Fund."*

*"By considering open-source technologies, we laid the groundwork for the project's **sustainability beyond the initial funding period**, ensuring its continued availability and impact."*

*"The successful engagement indicates a **clear demand** for this type of interactive experience."*

*"Participation in showcasing events supported by the HUB-IN Team allowed the project to be demonstrated to a broader audience, including **potential partners, investors**, and the general public. These events helped in gathering feedback, **generating interest**, and validating the project's concept and impact."*

Participating entrepreneurs

Outcome: Increased attractiveness as a place for entrepreneurs to locate and invest Entrepreneurial culture

Are the entrepreneurs themselves planning to replicate, scale or further exploit the prototypes?

"It's **definitely an option for us**. If we can secure the right funding to take the project from prototype stage into MVP and integrate the learning from the current project we can foresee this model being applicable in several other areas. Aspects alone such as the web XR experiences to direct foot traffic, photo scanning and digitally preserving heritage and the XR app development learnings are things that **can be utilised with different partners** on their projects."

"**Yes**. As a result of not being able to test the AI Salmon of Knowledge with the public as part of our launch event, we worked alongside our digital artist to reformat the asset and we were able to bring it to a wider audience as part of our most recent production, *The Worst Cafe in Belfast*. Audiences were able to order *The Salmon of Knowledge* from a menu. They scanned a QR code and using AR technology were able to place the Salmon in the room using the camera on their phones and converse with the AI Salmon. **We plan to continue to use this asset/technology** on future projects."

"We have applied to the Augment the City fund with the **intention of scaling this product up to a city wide scope**. This will give us more opportunities to bring heritage and local stories to life through immersive technology."

"There is also **potential for commercialising** the prototype by **partnering** with educational institutions, museums, and tourist attractions that wish to offer innovative ways to experience cultural heritage."

"Yes. We are **planning to create the project on a much larger scale** with more experimental features and a slightly changed user experience approach in order to include other areas of Belfast at first and then other towns."

"After the project concludes, we are considering **seeking additional funding to further develop** the idea. For instance, we may explore opportunities such as the Augment the City Challenge to expand upon our work and enhance the project's impact."

Participating entrepreneurs

Outcome: Increased attractiveness as a place for entrepreneurs to locate and invest Urban Culture

In September 2024 the Belfast HUB-IN team launched the Maritime Mile Heritage Lab. The Maritime Mile Heritage Lab offers visitors the opportunity to explore the Maritime Mile using tech and innovation, enjoying immersive digital heritage experiences to learn more about the history and the area's local characters and artefacts.

The Maritime Mile Heritage Lab was launched as part of the European Heritage Open Day where visitors experienced a variety of pilot innovation projects funded by the HUB-IN Challenge Fund, ranging from interactive 3D and Virtual Reality rooms, to trails, immersive experiences and augmented reality, the projects will all be bringing historical facts, artefacts and historic figures to life.



Outcome: Increased attractiveness as a place for entrepreneurs to locate and invest Contribution of HUB-IN to entrepreneurial results

All entrepreneurs but one considered the support from HUB-IN unobtainable elsewhere. Feedback is unequivocal that their innovations in digital heritage could not exist to the same standard without the Belfast Hub's support - heritage is now considered as a new vertical, and an asset to unlock new markets.

*"Without the support of the Challenge Fund, the **project wouldn't exist.**"*

*"Without the Challenge Fund support, "Maritime Echoes" would have faced significant constraints. The **scope and scale of the prototype might have been reduced** or not been possible at all."*

*"[Without the Challenge Fund's support], we would not have had access to the tourism and heritage market, as our initial market is arts and entertainment. This has opened up a **new and exciting commercial avenue** for our company."*

*"Without the Challenge Fund's support, we **would not have considered heritage** as a potential vertical for the company. This is something we are now factoring into business development and we have been speaking to other museum organisations as a result."*

*"This was an ambitious idea and required the funding that we got. We probably would have waited about a year to be able to apply for any similar amount from other organisations. We wouldn't have had the **advantage of collaborating with the local community** which became the heart of the creative process. So thank you very very much!"*

*"We have made **many new connections** through this fund and can see the potential to continue these relationships (and make new ones) with our future work. The openness and willingness of organisations to give of their time and share their heritage has been an incentive to consider the **opportunity to place future work in this area.**"*

Participating entrepreneurs

Next steps

Despite the success, entrepreneurs faced some obstacles in heritage-driven innovation the future Challenge Funds may seek to provide support on:

- *Digital accessibility*
while the prototype generally received positive feedback, engaging certain user groups, especially older demographics less familiar with digital interfaces, proved more challenging than expected to some entrepreneurs. This highlighted a need for a more tailored approach to user experience design to ensure inclusivity.
- *Time allocated for research*
the depth and breadth of historical and technological research required were initially underestimated, leading to some constraints in thoroughly exploring some areas.
- *Generating interest amidst hard-to-reach and time-strapped communities*
despite one entrepreneur's partners at EastSide Partnership having a wide network of community members, finding the right way to advertise and entice local community members to give up time to attend a co-creation session proved difficult, and therefore meant that turn-out was lower than hoped.
- *Fragmented land-use protocols amongst landowners*
negotiating permissions for the physical locations in the treasure hunt was challenging. Each location had its own protocol and timeline to provide consent for the experience. This adds delays and stress to the entrepreneur. Occasionally decisions were approved last minute, leaving little time to change / adapt plans.

*"The various agencies who own/are responsible for different pieces of land along Maritime Mile were extremely difficult to navigate. Due to the **challenges of redesigning the project** and the subsequent managing of people/locations, there was a considerable amount of additional project management time needed in order to deliver the project."*

Participating entrepreneur

SPOTLIGHTS: SPECIFIC CITY ASSESSMENTS

5.1.2. Innovator skills evaluation (Braşov)

N.B. each city conducts more evaluations than the snapshot presented here - see their D5.3 Evaluation Reports at <https://hubin-project.eu/library> for more findings and context.

ACTION 2: PRESENTING THE HISTORIC CITY AS A CLASSROOM

Key metadata

Action theme

Creating the ecosystem infrastructure
Acceleration programmes/challenge calls
Placemaking
Co-creation and community engagement
Art and creativity

Action clusters

New Lifestyles
Resilient and Human Connected Places

Expected outcomes (city level)

Increased sense of place for local communities
Improved skills for future generations of the HUA (participative planning, co-design etc)

Expected impacts (programme level)

- 1: reversing abandonment and neglect of historic heritage (cultural)
- 2: new blueprints for regeneration with enhanced wellbeing and quality of life (social)
- 4: cross-sector collaboration, job opportunities and skills (economic)



Operational results

This action has the goal to engage and upskill high-school students and provide meaningful engagement with heritage / the heritage area through co-creating a series of "Pretext Objects" within the public realm.

This takes place through acceleration and mentoring programmes for students on the topic of architecture in the public space in a context-centred manner reflecting the culture, values, concerns, interests and lifestyles of community members - for the design and construction of pretext objects.

The students designed urban furniture prototypes using a Design Kit which were then refined and executed, resulting in the installation of new furniture, the pretext objects, in Brassai, Sf. Ioan, Apollonia Hirscher, and Paul Richter Squares. The installation of these objects was part of a broader effort to make the public space in the HUA more accessible and engaging.

In addition to designing and installing public furniture, students contributed to 52 analyses and interviews that now make up the Old Centre's first digital database. These include:

- 24 moving map questionnaires on high school students' favourite pastimes and routes in the Old Town area
- 4 analyses of pedestrian movement in four Old Town locations
- 24 interviews with locals in four locations in the Old Town

The target set (3-5 pieces) was not only met but exceeded, with the installation of 11 "pretext objects" across four intervention squares, showcasing a diverse range of creative designs:

- [The articulated bench](#) (2 pieces)
- [The boat bench](#)
- [The wheelbarrow bench](#)
- [The snake bench](#)
- [The simple bench](#) (2 pieces)
- [The gazebo](#)
- [The pendant](#)
- [The triangles bench](#)
- Pole (2 pieces)



Outcome: Improved skill of future generations (participative planning etc)
(student assessment)

In Workshop 1 students learned about “Working With The Map”, and evaluated their change in skills before and after.

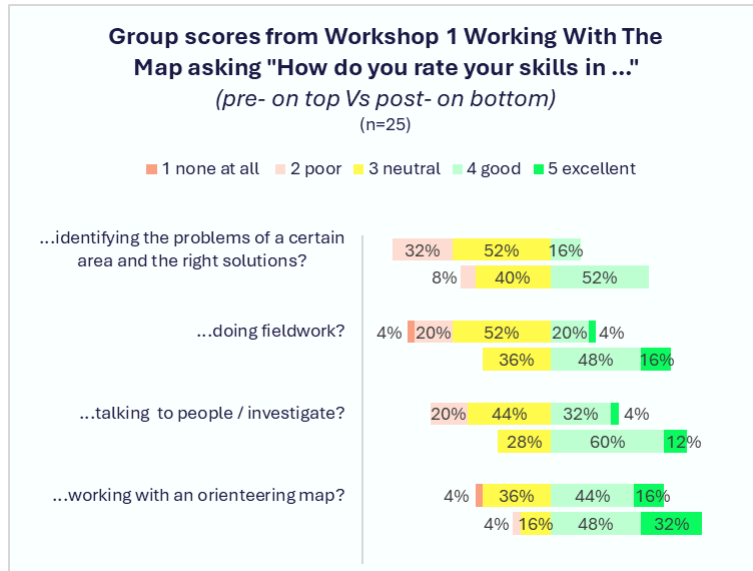


Figure 11: group scores in all skills

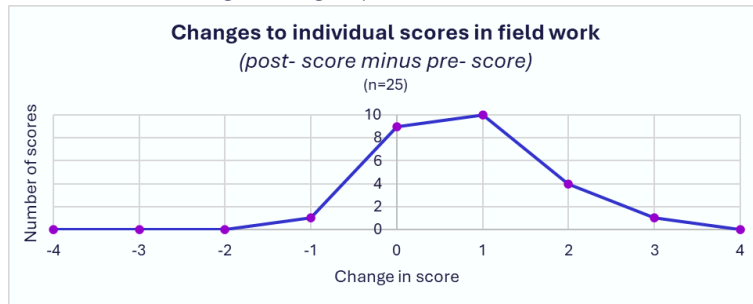


Figure 12: individual score changes in field work

All skills had some low or middle scores before training, validating the focus to some degree. Each skill had a fair proportion of students evaluating themselves as having no, low or only middling competence - this suggests that the training design was targeting relevant skills in need of development.

All skills also show an overall increase in competence when compared pre- and post- training, indicating success in growing the student’s competence. For example:

- majority low scores in pre-; majority high scores in post- all skills (except map work) begin with a majority of students rating themselves as having lower or middling scores before training, yet a majority with “good” or “excellent” skills after training.
- within those overall changes, some students benefit more or less than others for individual changes in field work (Figure 12), the most common outcome was to increase a skill rating by one point (e.g. from a score of “2 poor” to “3 neutral”). One student did decrease in rating (worth exploring rationale for future workshops), yet one student leapt three points from “1 not at all” to “4 good”, indicating the experience made a very sizable change for that student.

Example approach: working with a map of an area for urban planning. Initially a large proportion, 44%, rated their skills as good, and 16% as excellent. Following the workshop, 48% rated their skills as good, and the proportion of students who considered their skills excellent doubled to 32%. The workshop included detailed sessions on how to effectively use maps for urban planning and design. Students were engaged in activities that required them to analyse maps, identify key features, and understand the spatial relationships within the urban environment. These exercises helped students to familiarise themselves with different types of maps and the information they convey. Students practised skills such as mapping routes, identifying points of interest, and understanding the layout of public spaces. They also worked on creating their maps based on their observations and data collection during the site visits. This hands-on approach allowed students to apply theoretical knowledge in practical scenarios, thereby enhancing their map-handling skills.

*“This experience made me realise that I have **more courage than I thought**, to communicate with the people around me... to handle a map, to **orient myself** better.”*
Student

Workshop 2 “Understanding The Place” saw similar growth in all skills, to varying degrees. The biggest growth was in understanding different data types, and the least growth was in teamwork, although this was already a highly rated skill to begin with. All skills ended with a majority of “good” or “excellent” skills.

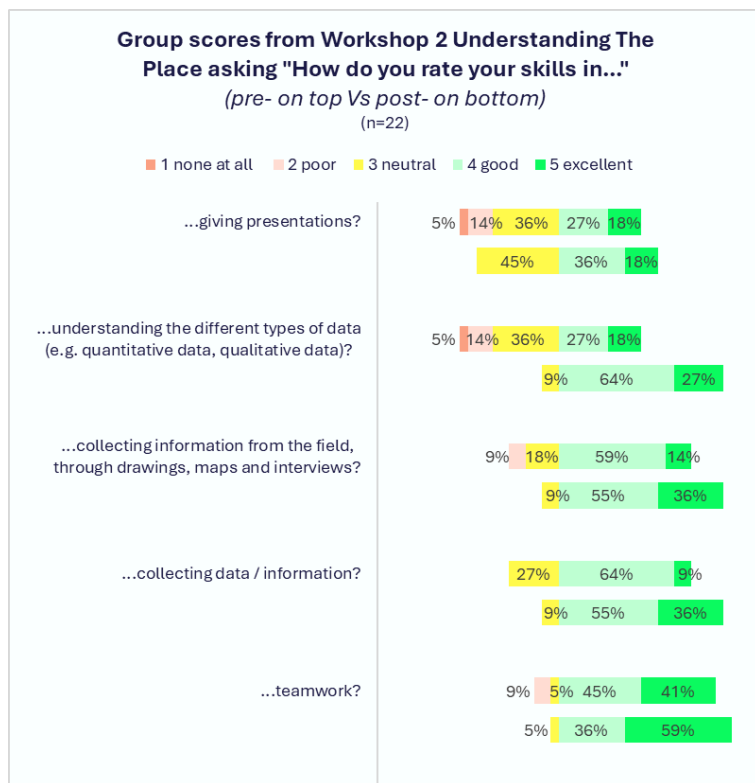


Figure 13: group scores in skills

*“[What the experience taught me is that] the local people’s stories... represent true encyclopaedias of **unwritten history**.”*

*“The **history of an old place can be continued even today**, it does not end after it was built.”*

Students

Overall improvement in giving presentations: the initial self-assessment survey showed that 27% of the students rated their ability to give a presentation as very good, and 18% rated it as excellent. However, a proportion of 36%, felt neutral about their presentation skills, with 14% rating them as low, and 5% as very low. After the workshop, there was a noticeable improvement in confidence regarding presentation skills: the percentage of students who rated their ability to give a presentation as very good increased to 36%, and those who rated it as excellent remained steady at 18%. Meanwhile, the percentage of students who felt neutral about their skills increased to 45%, indicating a shift from lower confidence levels.

Positive impact in comprehension of quantitative and qualitative data types following the workshop: initially 36% of the students rated their understanding as neutral, while 27% rated it as good, and 18% as excellent. After the workshop, these improved substantially: 64% rated their understanding as good and 27% as excellent.

Notable impact on proficiency in conducting fieldwork and gathering information through various methods, including collecting through drawings, maps, and interviews. The initial self-assessment survey revealed that 59% of the students rated these skills as good, and 14% rated them as excellent. After the workshop, these figures showed a positive shift, with 36% rating them as excellent. This improvement is critical for future participative planning and co-design initiatives, reflecting the success of the program in fostering essential fieldwork skills among the participants.

Improvement in confidence and ability to collect data and information: the initial self-assessment survey showed that 64% of the students rated their skills in collecting data / information as good, and 9% rated them as excellent. Post-workshop, these figures changed to 55% rating their skills as good and 36% rating the skills as excellent.

Recommendation for replication: in three scorings, a student assessed themselves weaker in post- than in pre-. These may represent genuine decreases in ability, or they may be due to the students discovering through the training that their initial assessment was overly confident and then later adjusting accordingly. In such cases, this can represent better self-awareness and is not necessarily always a negative. It may be therefore worth the Hub investigating this with the students / teachers to roll learnings into future workshops - all three decreases related to collecting and understanding data.

Evaluations in the third part (Summer School) illustrated some splits between the maturity of skills and knowledge prior to the activities.

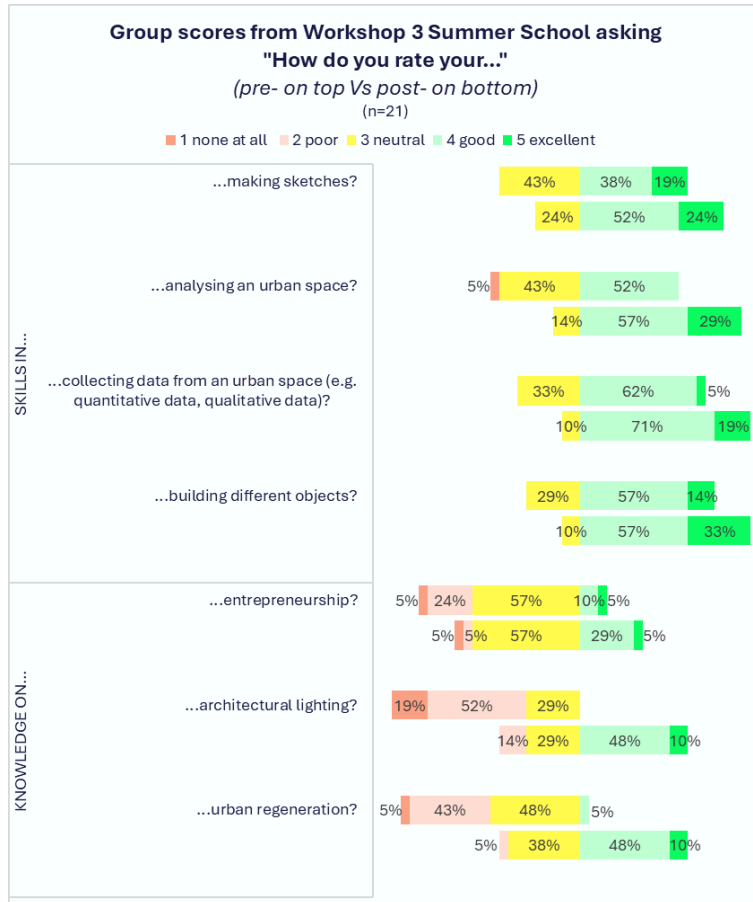


Figure 14: group scores in skills and knowledge

Few skills scored low prior to the activity, except analysing urban space

where 5% reported no skills at all. This is attributable to one student (out of 21 responding), who self-evaluated as “excellent” in the post survey, demonstrating the maximum gain in scores. When asked what the experience taught them, they also cited this skill as one of their two key takeaways: “to analyse the urban space and build objects that compliment this space” and affirming its likely use in their future.

Each skill saw a shift towards maturity, with varying splits across “excellent”, “good” and “neutral” skills post-training. As in previous workshops, some occasions saw students report decreases, and this would be worth exploring in future iterations.

One in three students left with “excellent” skills in building different objects (33%) and this freedom to engage in experimental prototyping was commonly cited as a key positive in open feedback.

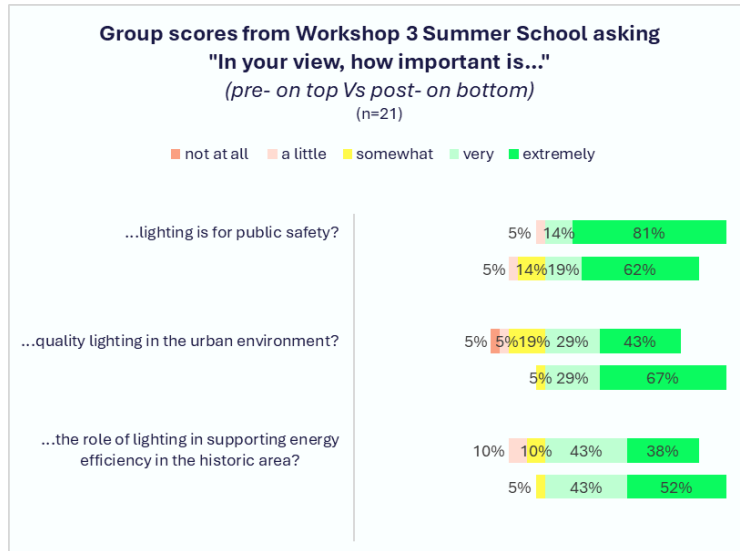
The targeted knowledge revealed more obvious gaps pre- training. For example, before the Summer School, the student's self-assessment relating to architectural lighting indicated a predominantly low level of understanding. According to the initial survey, a significant majority of 71% had limited or no awareness of architectural lighting principles. After participating in the workshop, there was a notable improvement in the students' self-assessed knowledge levels. The final survey showed a complete shift, with no students rating their knowledge as completely lacking - only 14% rated it as very low, while the majority moved towards higher self-assessment ratings. Specifically, 48% of the students rated their knowledge as very good and 10% rated it as excellent, reflecting a significant enhancement in their understanding of architectural lighting.

Recommendation for scaling: open student feedback revealed some demand for broadening the discovery to enable learning through comparison of other parts of Braşov and even other cities. For example, when asked for recommendations for future workshops, students cited “expansion into neighbourhoods in Braşov”, and “analysis of other cities and comparison between them.” This may be worth the Hub team exploring the feasibility of expanding the study area or even partnering with other Hub cities.

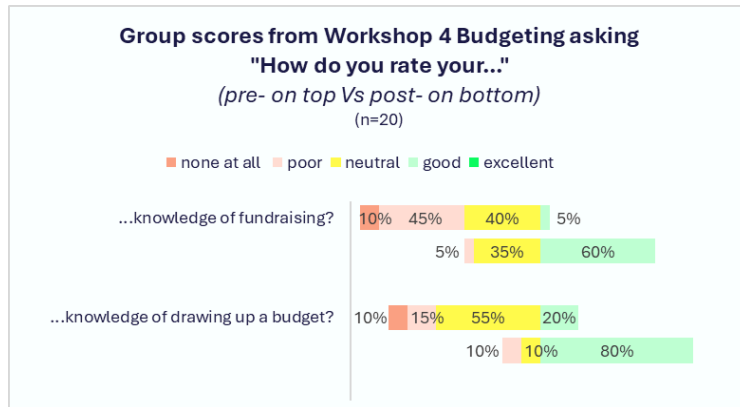
“What I liked most was [from the action was] that I learned to make quite **complex structures from simple objects.**”

“I can make other people look at Braşov from a different perspective, as a still **living history** and not just as some city.”

Students



Figures 15: group ratings of the importance of aspects of lighting



Figures 16: group scores in skills

Slight reduction in the perceived importance of lighting for public safety: the survey taken after the Summer School captures certain changes in students' knowledge of how lighting influences security. Initially, 81% of the participants considered lighting very important for public safety and this perception decreased to 62% post-workshop. The shift in perception indicates a nuanced understanding gained through the workshop, reflecting the in-depth discussions and practical applications during the Summer School, where students engaged in studying and analysing lighting from multiple perspectives, including its role in safety, aesthetics, and urban planning. The workshop emphasised practical skills such as designing lighting plans, evaluating existing lighting systems, and considering heritage values in lighting design.

Enhanced understanding of how lighting contributes to cultural value: students expressed a significant enhancement of their understanding of architectural lighting's role in heritage preservation. Their feedback highlighted that they learned about the practical applications of lighting in highlighting historical features, creating atmospheres that respect the original architecture, and ensuring that lighting choices contribute positively to the cultural value of heritage sites.

Clear improvements in budgeting skills are also visible for Workshop 4 (Figure 16).

*"I learned about the history of Braşov and the different architectural aspects of the Black Church, I learned about **architectural lighting** and how important its role is in the appearance and functionality of a city and I managed to make an analysis of the lighting in each of the squares of the project."*

*"The thing that helped me the most is **calculating the budget of a project**. Considering the budget, I could think differently about the project."*

"[Future workshops should include] the deepening of mediaeval construction techniques in the historic centre."

Students

Recommendation for replication: clear improvements in budgeting skills are visible from the 4th workshop (Figure 16), although the remaining presence of "poor" ratings in the post- scores, and absence of "excellent" scores, suggests that students leave with room to develop in this area. It may be beneficial to explore if the training could be adapted or extended, or whether students simply need more life experience to digest, or other factors.

Across all workshops and Summer School events, there is an overall positive change in skills and knowledge, strongly attributed to the Action.

Individual changes (all skills and knowledge)

Across all assessments of all skills and knowledge, the typical student is most likely to have seen an increase rather than a decrease (Figure 17 below). As mentioned above, there are a minority of cases of students assessing themselves lower in their post-scores than in the pre-, and this could be investigated further to understand if they perceive a genuine reduction in competence, or simply adjusted their scores to reflect a better understanding of “what good looks like”, after the training.

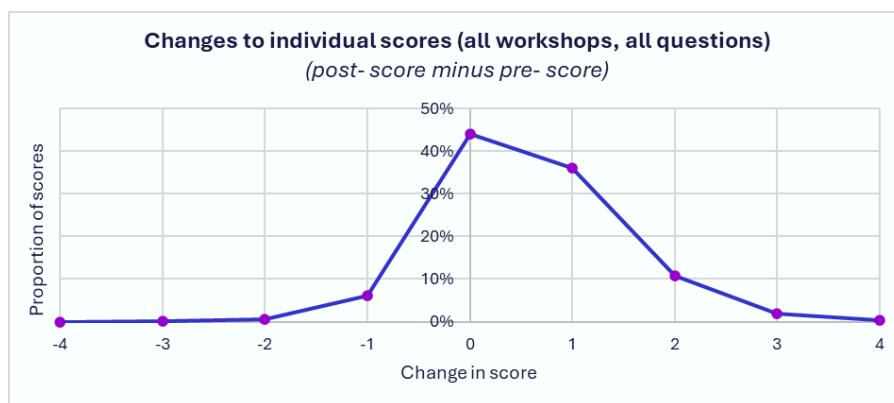


Figure 17: changes to individual scores

*"I have developed a **different way of looking** at things and through the prism of other people with different needs, likes, dislikes.*

*"I can bring about changes in Braşov, at the moment I limit myself to informing other people about **details that even I, as a local, did not know** until participating."*

"I would have liked more. Longer more connected routes. A deeper look into the life of an architect."

Students

Attribution

Importantly, the vast majority (93%) of students attribute their developments totally or mostly directly to the HUB-IN Action - i.e. not due to other training, other trends, or other experiences arising in the normal passage of time. This assessment for “deadweight” revealed that almost one in three students (29%) claim their improvement is “totally” due to the Action, and about 2 in three (65%) “mostly” due to the Action. The remaining 7% either believe it is not at all due to the Action or are not sure.

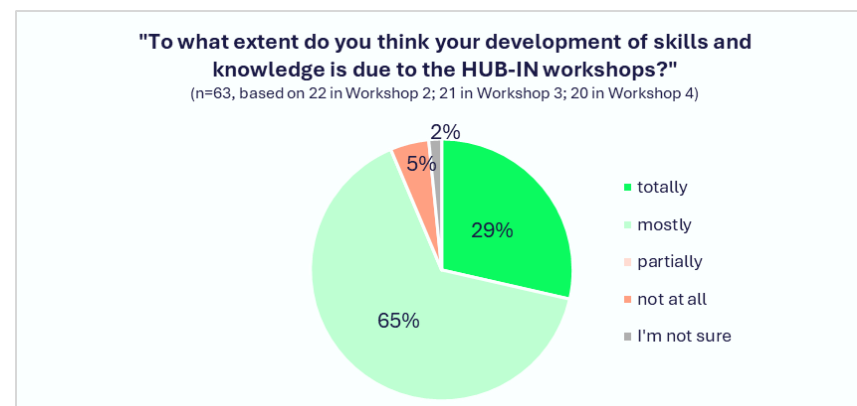


Figure 18: attribution of changes in scores to the HUB-IN Action

*"The fact that I learned how much history and places that I probably **would never have known about without this project** are hidden will help me."*

*"**This project gave me another perspective** on Braşov, so in the future I want to develop these ideas, participating in the city's evolution process."*

"I would have liked the mentors to give us feedback more often in the first days."

Students

The qualitative responses also illustrate some expected and unexpected positive consequences:

- *many students expressed a desire to apply what they learned to future job roles*
that involve fieldwork and teamwork. For instance, one student mentioned that the skills gained would be beneficial for future jobs that depend on fieldwork and team collaboration.
- *heightened awareness and proactive attitude towards improving public spaces*
some stated that the experience had given them a different perspective on common spaces in Braşov and that they would now be more attentive to their needs and desires, as well as those of others.
- *a sense of confidence and preparedness in students*
for example, one student mentioned that the experience made future projects, especially those involving fieldwork, seem less intimidating and more approachable. This newfound confidence suggests that students are now more likely to engage in projects that involve urban planning and community development. Also, the majority of students (18 out of 22) are considering a career as an urban planner or architect. Three students are not considering this career path, and one student is still contemplating it. This demonstrates a significant interest in urban planning and architecture among the participants, suggesting the program's effectiveness in inspiring future careers in these fields.
- *a broadening of perspectives and an enhanced ability to engage with the community*
several students reported that the workshops taught them to consider the needs and opinions of others, which they had not previously emphasised. This shift towards a more inclusive and empathetic approach is a significant positive outcome. Moreover, students developed new skills in data collection, teamwork, and presentation, which they found to be immediately applicable and useful. One student noted that the experience taught them how to look deeper into a place, understand its dynamics, and respond to its needs, which they found very valuable. These skills are likely to be useful in both their academic and professional futures.

Students also recommended improvements including expanded scope, feedback and technology:

- *more time for longer discussions*
in order to explore the city, engage citizens and “be able to listen more without rushing them”
- *additional insights into roles and techniques*
including a deeper look into “the life of an architect”, techniques such as mediaeval construction and impact of communism on the architecture of the city.
- *broader geographical coverage*
including expansion into neighbourhoods in Braşov, investigations of the less popular places in the city and even analysis of other cities and comparison between them
- *use of technology*
for example, enquiries into using special treasure hunt apps that incorporate discovery into teamwork exercises: giving the direction of the next point once the team answers the questions
- *additional feedback from the experts*
some requests for the mentees to give feedback more often in the first days

Overall, the additionality of the acceleration program is evident in the complex development of the student's capabilities and their enhanced sense of community engagement. The program not only provided technical skills but also fostered a sense of responsibility towards the community. For example, students learned the importance of maintaining quiet and peaceful places, understanding the spiritual and visual aspects of spaces, and valuing existing resources. This comprehensive learning approach ensured that students could see the broader impact of their work. Additionally, the hands-on experience with urban furniture design and the practical application of these designs in public spaces offered a unique learning experience that traditional classroom settings cannot provide. One highlighted that the program opened up different horizons, contributing to their portfolio and deepening their understanding of urban issues.

This blend of theoretical knowledge and practical application underscores the unique value of the action in developing well-rounded individuals, prepared to contribute positively to their communities.

Next steps

The project fostered innovation and creativity through the Acceleration program, with four teams working on four ideas. 11 pretext objects were co-created with students, now installed in four intervention squares, demonstrating practical solutions for enhancing the HUA. Although the target for start-ups offering solutions related to the strategic clusters was not met, the program's activities laid a foundation for future entrepreneurial developments.

As it progressed, it also raised interest in replication: the innovative educational programme and the accelerator set in place through the HUB-IN project also raised interest among the private sector and important stakeholders, having a high potential for replicability throughout many years to come, thus becoming a key element in the DNA of the city, transforming its Historical Area into a true classroom space.

The Hub team is thus intending to replicate this Action with different cohorts of students - a second edition was launched in 2024 and the Hub team would like the program to be annual.

The cohorts also raise an opportunity monitor annually for longer-term insights that can form a virtuous feedback loop into the Action's scope, learning objectives and format. Students could be followed up with every few years to understand if they have adapted their career path or participation in urban design, and what role the Action may have played.



SPOTLIGHTS: SPECIFIC CITY ASSESSMENTS

5.1.3. Public event attitudes and demographics dashboard (Genoa)

N.B. each city conducts more evaluations than the snapshot presented here - see their D5.3 Evaluation Reports at <https://hubin-project.eu/library> for more findings and context.

CROSS-ACTION EVALUATION

Key metadata

Action theme

Placemaking
Co-creation and community engagement
Art and creativity

Action clusters

Cultural and Creative Industries
New Lifestyles
Resilient and Human Connected Places

Expected outcomes (city level)

Improved attractiveness and sense of place for local communities

Expected impacts (programme level)

1: reversing abandonment and neglect of historic heritage
(cultural)

2: new blueprints for regeneration with enhanced wellbeing and quality of life
(social)

4: cross-sector collaboration, job opportunities and skills
(economic)



Operational results

As described for each individual Action (see the city's D5.3 Evaluation Report for more details).

Process evaluation

The Genova HUB of Innovation is led by the Genova HUB-IN Team - in strong synergy with the Caruggi Integrated Plan Working Group and the Unesco Office - which sets priorities, coordinates activities and acts as the main contact point for the project. During the second quarter of 2024, several coordination meetings and working sessions took place within the Team to implement the actions.

In particular, we worked closely with the seven external subjects responsible for implementing the multiple projects making up the four actions of the Genova Action Plan. Besides holding regular monthly coordination meetings with all of them as a group, to exchange updates on their respective projects and identify opportunities for synergies and collaborations, we had weekly (often daily) contacts with each subject individually, facilitating their activity from an administrative standpoint and supporting them in each step of the implementation.

Media and social media were used to deepen engagement: 22 local newspaper articles published on HUB-IN and its Actions / public events, and 23 social media posts (14 by Comune di Genova, 7 by IRE Spa, and 2 by Job Centre).

Towards the end of the programme, we administered a Visitor Questionnaire focusing on the implementation of the actions - details below.

Outcome: Improved attractiveness and sense of place for local communities

A Visitor Questionnaire, focusing on the implementation of the actions, was delivered to people attending the different Actions' main events and presentations, to get their views and qualitative insights about the implemented initiatives.

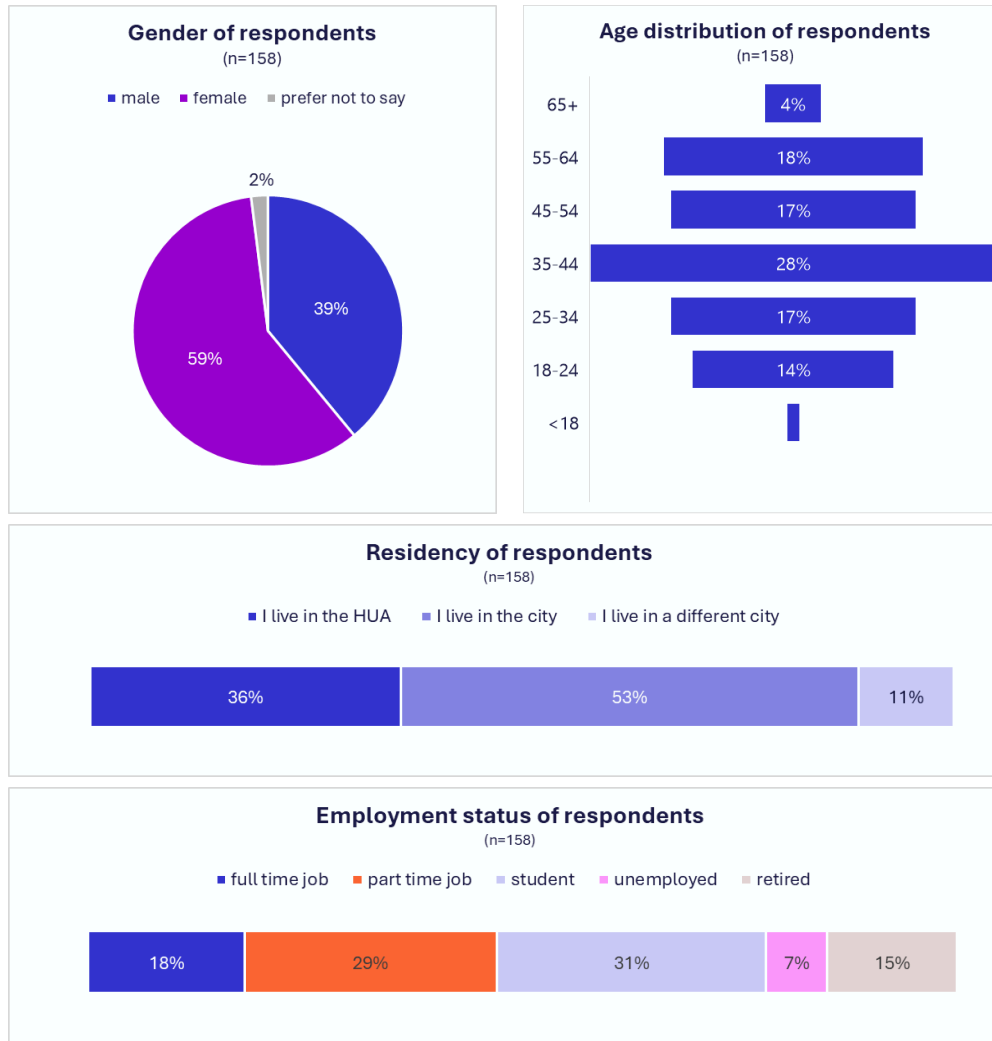


Figure 5: gender, age, residency and employment status of respondents

We collected a total of 158 questionnaire responses:

- 50 for Action 1 Urban Outfitting
- 45 for Action 2 Public Art
- 63 for Action 4 Acceleration Programme
- no questionnaires were collected for Action 3 Storytelling, as the activity did not have public events.

In terms of demographics, there was a broad representation amongst the respondents in terms of:

- *balanced genders, with a lean toward female*
just over half (59%) were female, just under (39%) male.
- *broad age ranges*
respondents aged from below 18 to over 65, giving insights from across the age spectrum
- *broad employment status*
income data was not requested for reasons of appropriateness, privacy and to remove barriers to questionnaires being filled in. However, respondents revealed that they were (in order of proportion) students (32%), full-time employed (17%), part-time employed (29%), retired (15%) and unemployed (7%).
- *mostly from Genova*
approximately 9 out of every 10 respondents (81%) were either from the HUA or the wider city. About a third were from within the HUA itself - importantly, this ensures the feedback included voices from the target area itself, and not entirely from visitors or tourists.

N.B. normal limitations apply to surveys collected via small scale and "non-probability" sampling methods, i.e. the findings can support qualitative assessments and useful on-the-ground insights, but can not be taken as representative of the entire HUA resident community.

The Visitor Questionnaire assessed attitudes on the Actions' ability to increase a) the number of visits and b) attractiveness of the HUA, as well a simpler qualitative comparison of adjectives selected to describe the Actions (Figures 6 and 7).

In general, attitudes were strong on the expected outcomes - see the majority "agree" and "strongly agree" attitudes in Figure 6, across three of the Actions' ability to increase footfall and attractiveness of the HUA (no questionnaires were collected for Action 3 Storytelling, as the activity did not have public events).

Action 1 Urban Outfitting receives particularly high positive perceptions, with no respondents disagreeing with the Action's potential to stimulate the two measured outcomes. Encouragingly, about half (48%) strongly agree that the shutter paintings can facilitate an increased number of visits. Almost 2 out of every 3 (60%) strongly agree that the intervention can make the HUA more attractive - this is the highest result in the questionnaire, indicating some potential for replication / scaling.

Action 2 (Public Art) and 3 (Experimental Call) are similarly positive - they each score over 80% of respondents either agreeing or strongly agreeing on the ability to contribute to footfall and attractiveness. The difference with Action 1 is that they have some detractors as well as advocates - each has at least some respondents "strongly disagreeing". For example, about 1 in 10 (10%) of respondents "strongly disagreed" that Experimental Call would increase the attractiveness of the HUA - this raises questions on the drivers behind these different experiences and attitudes. Certain constraints in the HUA (see section "Limitations of this Document" on stakeholder fatigue etc) limited the extent to which deeper surveys and focus groups could be deployed, but it may be insightful for the Hub team to consider if further exploration is possible. For example, if the Action's programme of events is diverse, then some events may have had a deeper impression than others and this may inform future replications of the ideal blend of formats, partners, priorities etc.

The Actions were seen somewhat as engaging and inclusive in a light-touch qualitative poll - these adjectives were chosen by about 1 in 4 respondents (27%) as their selection to describe the Actions (Figure 7). This was by far the most popular selection, with "innovative" and "enjoyable" falling second and third, suggesting the Actions were seen as a working blend of entertaining new experiences in the HUA that were open and accessible to different social communities and groups. In fact, 93% of respondents were there specifically for the Actions, indicating new visits that day. The lowest non-"other" selections (such as scores on "useful") may be worth exploring in order to understand further how to improve on these.

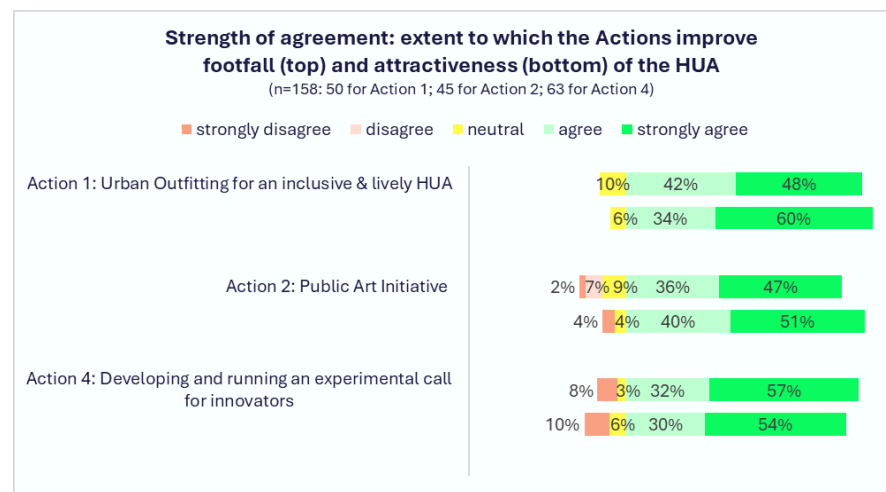


Figure 6: strength of agreement on intended outcomes of the Actions

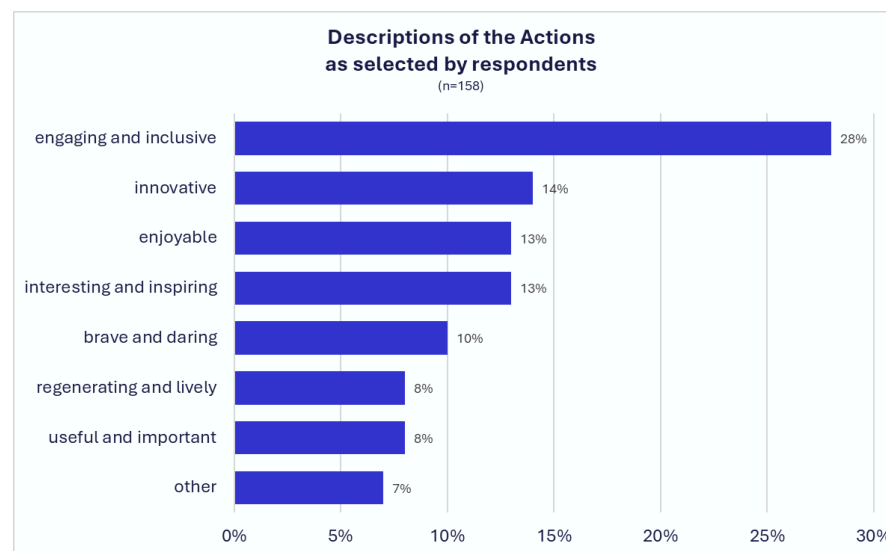


Figure 7: description of the Actions as selected by the respondents

Respondents also offered positive feedback for future replications, with 47 (almost one in three) independently suggesting replication or scaling. Other feedback included suggestions to increase the advertising to promote discovery - especially physical advertising that can complement the social media campaign. Increasing inclusivity was also a suggestion raised multiple times, such as involving local schools and generally reaching as many citizens as possible. Several also raised a desire to engage more deeply with the meanings behind the art works, and part of this included digitising aspects such as guides and discovery tools - and even to buy and sell. Overall these suggestions indicate interest in continuation / expansion of the Action, and offer insights that may assist with their development and improvement in future. 75 respondents did not offer any feedback (e.g. “no”, “not sure”, “nothing at the moment”, etc or left the response blank).

Replicate it (32)	Scale it geographically (10)	Scale it thematically (5)
<p><i>“The action should repeat itself over time.”</i></p> <p><i>“Make it a model to be re-proposed.”</i></p> <p><i>“Replicate several times (even in the evening.”</i></p> <p><i>“This project must absolutely continue because it gives citizens and tourists the opportunity to get to know a reality fundamental to the growth of the neighborhood.”</i></p>	<p><i>“Expand to all neighborhoods of Genoa.”</i></p> <p><i>“Continue the project also on other shutters.”</i></p> <p><i>“Extend the Action to other neighborhoods.”</i></p> <p><i>“Expand it.”</i></p>	<p><i>“Involve more ethnic groups in organisation and music.”</i></p> <p><i>“Promote it - find ways to include other cultures.”</i></p> <p><i>“If time permits, do outdoor events.”</i></p>
More inclusivity (5)	More digitisation (3)	General positive, no suggestions (6)
<p><i>“Propose the questionnaire also in the schools.”</i></p> <p><i>“Involve as many citizens as possible.”</i></p> <p><i>“Reduce indifference to increase participation.”</i></p>	<p><i>“Digitise all the drawings.”</i></p> <p><i>“Create a digital guide to discover the artists and tell the works.”</i></p> <p><i>“Create a digital version that allows you to buy/sell but also relate in the moments.”</i></p>	<p><i>“I think it is already excellent!”</i></p> <p><i>“No , I don't think there are any other things to point out.”</i></p> <p><i>“Inviting action, everything perfect.”</i></p>
More advertising (16)	More information (2)	More environmental (1)
<p><i>“Make it more often and advertise it.”</i></p> <p><i>“More advertising visually on the street and not just on social media. Simple road directions for the events in the main streets where the public already finds passage.”</i></p> <p><i>“Involve also the shopkeepers for posting posters in the event area. Thank you!”</i></p>	<p><i>“It would be nice and useful if there were labels to explain the deep meaning of the works, so everyone can understand.”</i></p> <p><i>“[Make] labels more visible with description of the works.”</i></p>	<p><i>“[Make it] more green.”</i></p>

Figure 8: qualitative feedback from the 158 installation respondents

Additional “co-benefit” outcomes:

Knowledge transfer and innovation brought into the HUA

Additional qualitative insights on the Actions’ contributions were investigated via Focus Groups, held after completion of the Actions. Key insights are summarised below:

1. Focus Group with all the external stakeholders implementing the actions

On July 3rd 2024 at the Genova Blue District the final Focus Group with external stakeholders was held. The Genoa Hub-In Local Team and representatives from all the subjects implementing the activities of the Action Plan attended the meeting. Specifically:

Public sector (6)

Fabio Tenore – Job Centre
Silvia Cama – Job Centre
Silvia Campailla – Municipality of Genoa
Roberta Palmieri – Municipality of Genoa
Cristina Giusso – Municipality of Genoa
Michela Fossa – IRE Liguria

Private sector (6)

Matilde Sproccati – BAM Strategie Culturali
Stefania Capuzzi – Social Hub Genova
Francesco Cavalli – Blu – Breeding and Learning Unit
Chiara Pezzimenti – Blu – Breeding and Learning Unit

Academia (1)

Daniela Pasqualini – Academy of Fine Arts

Community (3)

Valentina Saulle – Solidarietà e Lavoro
Laura Monferdini – Solidarietà e Lavoro
Mario Gagliardi – Coop. Il laboratorio
Laura Iozzi – Coop. Il Laboratorio
Alessandro Mazzone – Ass. Forevergreen

The aim of the Focus group was to discuss the perception of the implemented actions’ impact on the HUA; the learnings as well as the do’s and don’ts; and how effective the adopted methodology could really be in revitalising the area. The reflections align to the “entrepreneurial ecosystem” elements that are the “ingredients of a HUB-IN place” per the project’s Framework:²⁹

Ecosystem Element

Reflections

Entrepreneurial Culture

Significant contribution to experimentation and innovation

While the impact generated cannot already result in a change of perception of the HUA, it constituted a first step of a new way of living in the area, bringing new energy and greatly motivating those who live and work in the HUA.

Leadership

Acknowledgment that the territory needs coordination

E.g. the “Patto di sussidiarietà di Pré”, an ongoing agreement between the Municipality and local associations, organised a lot of small events in the HUA but if all these events remain without coordination the results will not be valuable.

Challenge: not enough time to create a real impact, and related permit constraints

The HUA is subject to constraints by the National Authority for Cultural Heritage that can take up to 120 days to allow a permit for implementation of any kind of action. So it is easily understandable how this could affect the results of a six months long implementation project. The time constraint was even more impactful considering that all the projects implemented as part of the Action Plan were experimental and had never been implemented before. Months were spent to understand how to solve problems and overcome constraints, so probably a second edition will be likely to have a higher impact on the territory.

Knowledge

New ways of doing things and increased capacities

One of the most valuable results was indeed the many lessons learned by the implementers; in finding ways to solve all the difficulties they met along the way, they learned new ways of doing things and increased their capacities. Some of the subjects in charge of implementing found creative ways to tackle problems

²⁹ <https://hubin-project.eu/library/hub-in-framework-overview/>

Ecosystem Element

Reflections

and made a virtue out of necessity. For example, *Solidarietà e Lavoro*, who didn't get the permission from the National Authority of Cultural Heritage to install projectors on the protected building's walls, created a network with some of the shops which ended up hosting them inside their premises. In this way, they increased the involvement of inhabitants and local businesses in the project, who felt a sense of belonging with it and a strong cultural identity.

Networks

Interaction and co-operation was a positive result

Highlighted multiple times during the discussion was that all the projects and implementers interacted and cooperated with each other. Typically, a lot of small events are organised in the HUA, but they don't manage to reach people and get lost in the confusion because of a lack of coordination between the local subjects implementing them. Thanks to HUB-IN, a local ecosystem of stakeholders was created, all working together for the first time, cooperating, sharing the same message and sometimes the same resources, hence maximising the results of their individual projects. Those subjects, all sharing the same objective of revitalising the HUA, got to know each other and work together, and it is highly likely that this cooperation will continue in the future and generate new projects for the area. This coordination between the projects contributed to avoid stakeholder fatigue, as all efforts towards their involvement were coordinated, and also reinforced participation in the individual projects' events.

Urban Culture

The role of discovery and networking in overcoming safety concerns

Despite the small size of the action, some further impacts could still be seen. E.g.:

- *the Da Banchi a Pré project brought a lot of new people to the HUA helping them overcome the fear of walking those streets and contributing to their discovery of the area.*
- *The Fair to Share project helped open a previously closed heritage building to the public, hence contributing to its discovery by the many people visiting it during the project. Fair to Share also created a ground for local shopkeepers and artisans to network and plan future projects together.*

New visions and processes kick-started

The HUB-IN project offered new visions and kick-started new processes of reshaping the HUA in relation to the urban system, from a social, environmental, infrastructural point of view. HUB-IN has kept this complexity, without having the ambitions to solve all the problems of the area, by leaving two different imprints: the first is a material imprint of a collective experience of imagination on a defined territory (e.g. the painted shutters, the floor decorations, etc) but the most powerful legacy is the immaterial one consisting in the synergies between the subjects who are rooted on the territory and those who explored it for the first time; this showed that there could be a different way to imagine the future of the HUA by imagining new possibilities and new relationships.

Table 1: findings from the focus group with external stakeholders implementing the Actions

There were some challenges: participants agreed that it was too early to talk about “impacts”, as those would need calculated after at least two years from implementation. Moreover, participants highlighted how the amount invested by the project in such a large and problematic area could only have a small impact, almost irrelevant.

Overall, participants agreed that all the projects contributed to create a new way of doing things in Genoa and to imagine a new life and future for its HUA, even if we cannot talk of large impacts. A single project cannot be held responsible for changing the urban system or the social complexity, but the responsibility of the single project should be to open the city's imagination and help its inhabitants see things from a different and new point of view. This surely happened in Genoa. The responsibility to solve the social and urban problems belongs to politics.

SPOTLIGHTS: SPECIFIC CITY ASSESSMENTS

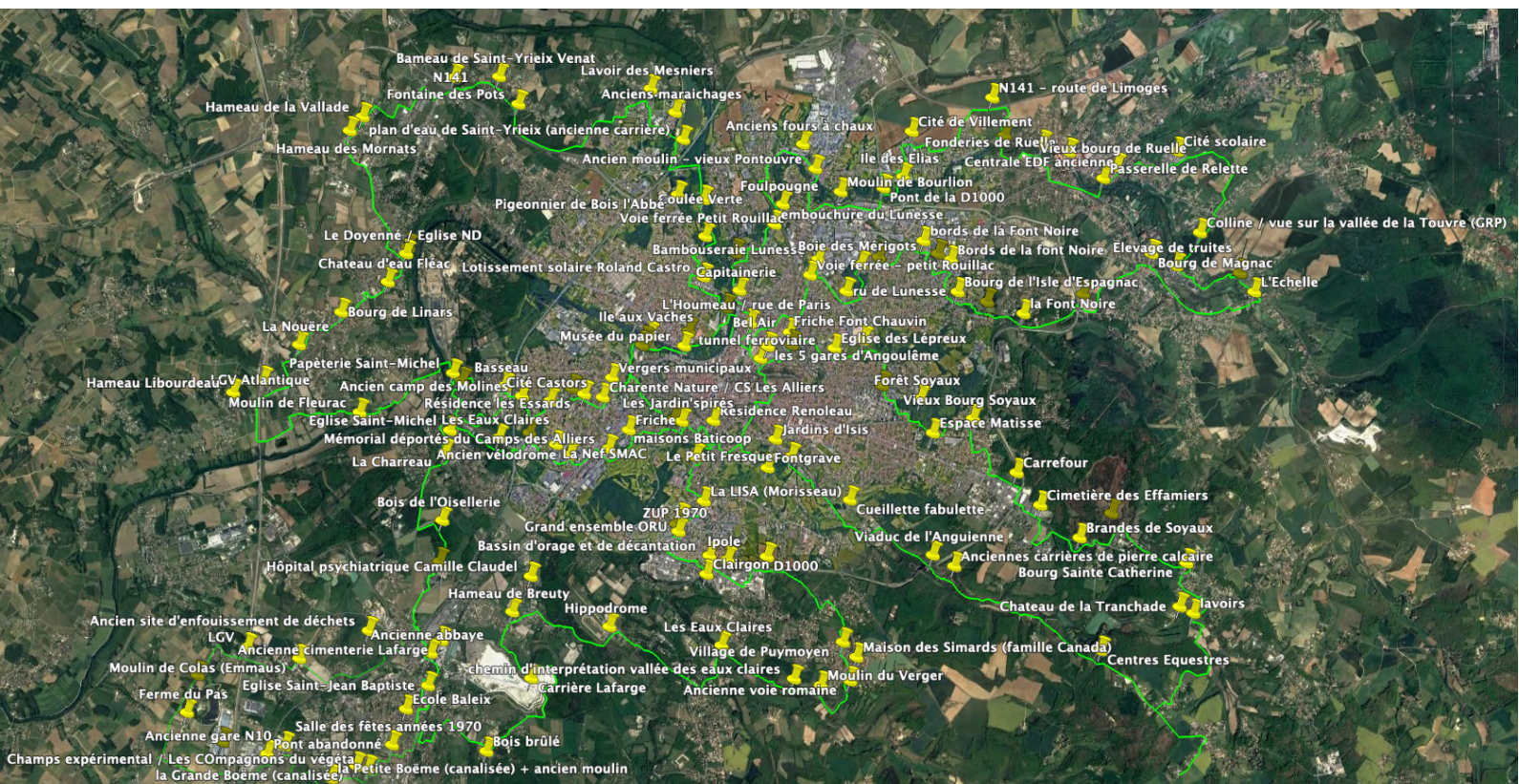
5.1.4. Cultural discovery outputs (Grand Angoulême)

N.B. each city conducts more evaluations than the snapshot presented here - see their D5.3 Evaluation Reports at <https://hubin-project.eu/library> for more findings and context.

ACTION 2: CO-DESIGN A METROPOLITAN TRAIL AS A FRAMEWORK FOR THE CARAVANE CREATIVE LAB

Key metadata

- Action theme** Placemaking
Co-creation and community engagement
Art and creativity
- Action clusters** Cultural and Creative Industries
New Lifestyles
Resilient and Human Connected Places
- Expected impacts (programme level)**
- 1: reversing abandonment and neglect of historic heritage (cultural)
 - 2: new blueprints for regeneration with enhanced wellbeing and quality of life (social)
 - 3: boosting heritage-relevant innovation in HUA's and cultural landscapes (environmental)
 - 4: cross-sector collaboration, job opportunities and skills (economic)



Operational results

Approximately 150 trail locations have been identified, described, visited and mapped, leveraging stakeholder insights and co-creation. This includes:

- 27 partner/sites identified along the route (associations, collectives, cultural facilities, etc)
- 36 sites identified by caravanners following collective scouting

These 150 places-histories have been grouped into a dozen categories, creating a new heritage portrait of Grand Angoulême:

- agricultural
- civil
- historic monument
- housing history
- hydrography
- garden
- industrial
- infrastructure
- natural
- place of memory
- transport
- vernacular

The list was drawn up according to a number of criteria: each element chosen must have more than its own history to bear. For each of them, the aim is to provide an understanding of a part of the conurbation as a whole. Building a common narrative across the agglomeration invites us to consider this list not as a collection of anecdotes, but as a puzzle, a body of evidence to answer the question: what is Greater Angoulême? What does Greater Angoulême depend on?

So, over and above historical value in the classical sense, the aim of this list is to identify what constitutes heritage, in the sense of UNESCO's historic landscapes.

Process evaluation

In the city team's feedback: the project team met a lot of people, especially in 2023, to discuss the general approach, in particular with resource persons (scholars, historians, association leaders, etc), but it wasn't possible to set up real joint workshops for a lack of time.

If we had to do it again, we'd organise a series of workshops open to specialists in the area. Several hours together around the map, taking notes and thinking together about what this metropolitan trail could/should tell.

Overall, we've achieved our objectives. We conducted our shared survey and amassed a wealth of information. In particular, over 25 hours of footage archived by Radio ZAIZAI. But we didn't have the time to go through all the bibliography and archives. If we had to do it all over again, we'd spend more time on these preparatory phases.

Outcome: Increased footfall for economic actors located near the trail

The trail is expected to remain in development until the end of HUB-IN - it is planned to launch in Spring 2025 which is after the time of the final reports, and until it is opened and bringing in visitors, measurements of footfall and associated expenditure to local sites is beyond the timelines of this project. In order to be able to measure progress towards this medium-term outcome, for this action the city team therefore planned to monitor using five shorter-term output indicators tracking the interim pace, scale and co-creation of its development (see Table 1 and supporting explanations below):

Indicator	2022	2023	2024				
	annual total	annual total	Jan	Feb	Mar	Apr	May
Number of heritage sites identified along the Metropolitan Trail	9	101	101	121	121	144	152
Number of partner places along the Metropolitan Trail	3	26	26	26	26	27	27
Number of places and stories suggested by members of the Caravane	7	36	36	36	36	36	36
Re-use of underused spaces (e.g. total number of underused spaces per year, per type of space)	NA*	NA*	NA*	NA*	NA*	NA*	NA*
Number of map downloads	NA*	NA*	NA*	NA*	NA*	NA*	NA*

*Table 1: progress in the development of the trail over time, for the shorter-term indicators
* the two bottom indicators are marked NA as they are too early to assess until the trail launches (the trail is currently in development, these indicators will become relevant post- launch or in the medium-term)*

Number of heritage sites identified along the Metropolitan Trail:

Status: ongoing
Final objective: 200
Level achieved as at June 2024: 152

Historic heritage mapping is carried out segment by segment. The future metropolitan trail will be made of 8 segments. As each segment is the subject of several itinerary hypotheses, around 25 heritage sites will finally be identified on each of them.

Until now, for each segment, around ten heritage sites were identified and mapped. This list will serve as the basis for the guide for the general public. Some sites will be merged to highlight the specificity of each location. We want to consider each heritage element in its context, not as a floating object.

Number of partner places along the Metropolitan Trail

Status: ongoing
Final objective: 20-30
Level achieved at at June 2024: 27

The partner places located along the future metropolitan trail have a variety of profiles: art school, fishing federation, social centre, environmental association headquarters, farm, private residence, business incubator and so on. For a site to be considered as a partner, it must have established direct contact and exchanged views on the project. Each partner site represents the project on its own scale.

Given approximately one in five sites on the trail belong to partners, it is hoped that they will benefit from future footfall once the trail is fully opened, and the associated uplift in brand visibility / awareness / expenditure (see a potential socio-economic trail study this proposed in Grand Angoulême's tailored monitoring methodology).³⁰ On average, each segment has 3 partner sites. Between January and June 2024, one more partner was identified.

³⁰ <https://hubin-project.eu/library>

Number of places and stories suggested by members of the Caravane

Status: ongoing
Final objective: 50
Level achieved as at June 2024: 36

After each collective Caravane location, participants are invited to fill in a qualitative questionnaire including these two questions:

- *What are the three places/meetings that stood out for you during this "Caravan"?*
- *Do you have an idea for a production based on one of these places (comic book, novel, video game, sound walk, film...)? What would it tell?*

This gives us another look at what may or may not be significant in terms of historical heritage and narrative potential. Responses indicated that these questions were soon a bit redundant to the participants and they were not presented to them in the last months. For this reason, no new proposal was made since January 2024, so the indicator did not change.

Re-use of underused spaces (e.g. total number of underused spaces per year, per type of space)

Status: NA (too early)
Final objective: 20-30
Level achieved at at June 2024: 0

This indicator is currently marked as NA as it is too early to assess, until the trail launches (the trail is currently in development and launches in Spring 2025).

Number of map downloads

Status: NA (too early)
Final objective: 500 / 1,000
Level achieved at at June 2024: 40 test maps were downloaded on the 1st of June event

This indicator is currently marked as NA as it is too early to assess, until the trail launches (the trail is currently in development and launches in Spring 2025).

The entire trail has evolved through the various design stages:

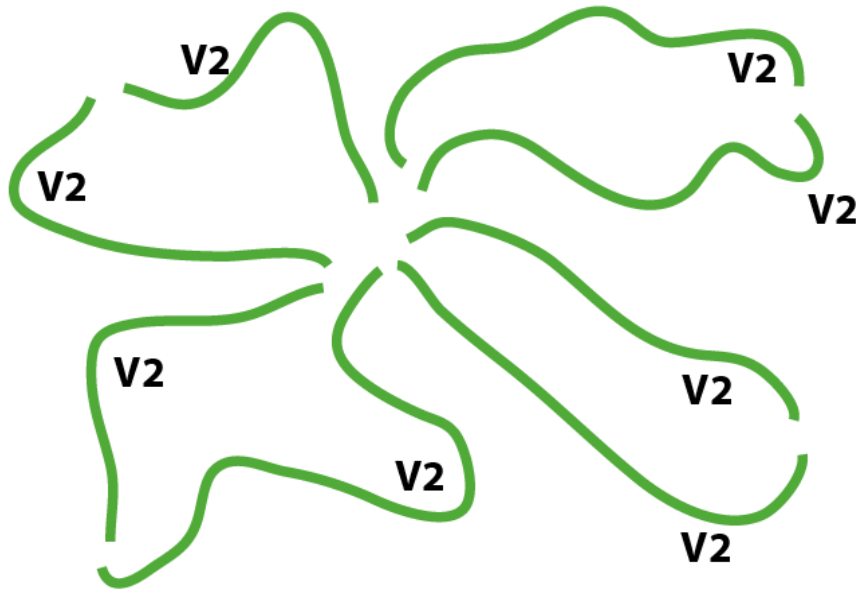


Figure 2: early Draft Versions of the 8 segments of the trail that emerged during early co-design - rough outlines of walkable sections

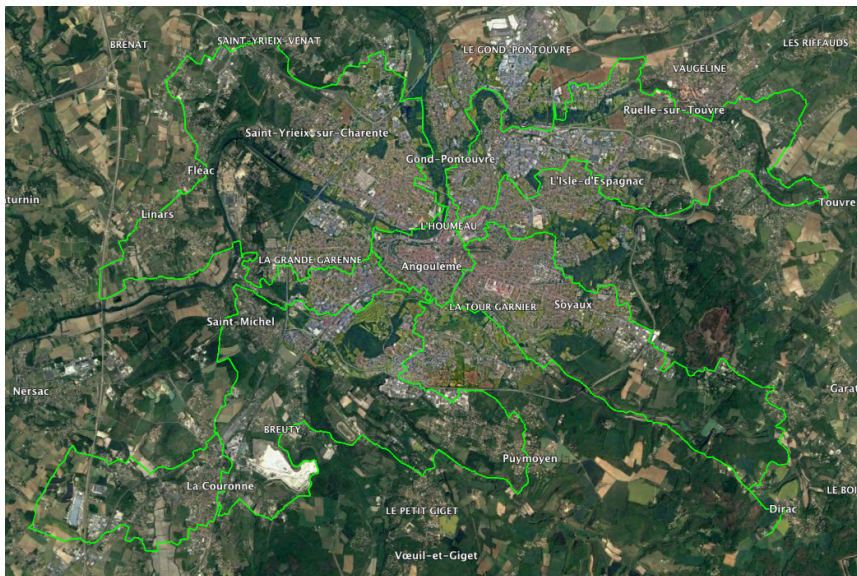


Figure 3: First Versions of the 8 segments of the trail that emerged during early co-design - mapped to the local landscape



Figure 4: Finalised Versions of the 8 trail segments that finalised from the co-design - mapped to the local landscape and populated with specific sites

Additional “co-benefit” outcomes:

Improved access to data on historical heritage for project partners

As stated above, approximately 150 sites have been identified for the Metropolitan Trail, with the place-history data grouped into 12 categories that create a new heritage portrait of Grand Angoulême:

Agricultural (5%)

e.g. Experimental field of the Compagnons du V: an old corn farm with **experiments in soil remediation**, bringing dead soil back to life through replanting trees and organic matter.

e.g. Anguienne equestrian centres: the Chatelard estate offers **horse boarding facilities** - this is also where actor Depardieu slept during the **filming** of Mammoth.

Housing history (10%)

e.g. Roland Castro solar development: in the 1970s, after the oil crisis, the government launched a competition for **solar houses**. This site is Roland Castro's housing project : an innovative architecture but which has difficulty standing the test of time.

e.g. Basseau camps: **former workers' camps** for Poudrierie workers, then prison camps and squatted barracks after World War 2.

Industrial (17%)

e.g. former port of Houmeau: created in the 13th century, it was the most **important commercial port** in the region and experienced significant development with the construction of the royal rope works of Rochefort and the system of barges (boats loaded with hemp and other goods). This is the industrious **district that Balzac speaks of** in Lost Illusions. With the arrival of the railway, the boatmen lobbied not to open a tunnel so that Houmeau remained a terminus with transfer of iron to the boats.

Place of memory (1%)

e.g. Alliers camps and Molines camps: **camps** that were used for Gypsies and Spaniards

Civil (13%)

e.g. comic strip fresco 1982: the **first painted wall in Angoulême**, which is now well-known for its frescos by local comic artists.

e.g. Oisellerie High School: this hospital, very modern for its time, was designed as an **autonomous community** with greenhouses and lands. The boarders, the insane, lived in community until death. The architecture is reminiscent of the cloister, the small chapel, today **open to all religions**.

Hydrography (10%)

e.g. La Vimière: one of the Houmeau rivers, sometimes hard to locate, piped throughout the Grand Font district since the construction of the Angoulême stations. Walkers in the neighbourhood can hear it under the manhole covers. During the bombing of the station, the neighbourhood was flooded because it had a “dyke” effect. There are entrances to this **underground canal**, undoubtedly with pretty masonry, **stone vaults** etc.

Infrastructure (8%)

e.g. Seguins footbridge: a fairly long **pedestrian bridge** from the beginning of the century. Picturesque view of the Touvre, the ducks and wildlife. It's a postcard moment.

e.g. Relette footbridge: footbridge from the beginning of the century, planned since 1882 to facilitate the passage of employees of the Ruelle foundry and those of the **Veuze paper mill**. Work was completed in 1902 after delays due to financial and political problems.

Transport (6%)

e.g. Roman Road: **underground ruts** attest to the presence of a historic (secondary) Roman road which connected the village to the Eaux Claires valley, identified from ruts left by carts in the **Gallo-Roman era**.

e.g. the 5 stations of Angoulême: **important rail hubs**. Allied bombing during WW2 resulted in the abandonment of all stations except one remaining. These railway lines are found throughout the city, particularly rural lines.

Historic monument (5%)

e.g. Chateau de la Tranchade: a **Gallo-Roman site**, then castle, which protected one of the entrances for centuries: the Anguienne valley.

e.g. Effamiers Cemetery: a large cemetery behind Leroy Merlin's stock. Small, very moving **Muslim square** with very simple and humble tombs below.

e.g. Saint-Michel Church: **octagonal church** with separate bell tower. Many modillions, Romanesque architecture.

Garden (6%)

e.g. Bourguine: an outdoor swimming pool from 1959 which has at times featured a beach volleyball court, 3-star campsite, youth hostel, Old Métais music concerts, the canoe kayak stadium. Considered a **wasteland for almost 20 years**, it was a bathing area for almost a century.

e.g. Frégeneuil: **formerly a gravel pit**, the pond has become a carp fishing spot and one of the most important local parks. 1922 photos indicate there were vegetable gardens here.

Natural (6%)

e.g. Fontaine des Pots: a place where **hemp was soaked** before being worked. Around it is a wood of chestnut and hazel thickets.

e.g. Mérigots woods: an **ancient wood** that was already on old maps: not the result of agricultural abandonment.

e.g. Bamboo Grove: a small, very dense bamboo forest with a stream meandering at the foot of the trees. **Artists come here** to supply themselves.

Vernacular (13%)

e.g. Pont de Saint-Antoine: an old Armenian, nicknamed the **Pirate of Angoulême**, dedicated himself to the construction of boats of all kinds. Also nicknamed the President of Houmeau, he opened an informal shipyard on the shore.

e.g. Old town / Maison des Simards: **Thousands of Canadians** descend from this family who emigrated to Canada in the 19th century. They return every year to find the house where their ancestors lived.

Table 2: examples of the heritage and history encoded in the approximately 150 heritage sites and 12 categories

Outcome: Increased inclusion of cultural stories in the CCI sector's products

The Open Call resulted in numerous projects embedding and leveraging the local cultural heritage. See Table 5 below for a snapshot selection of artists' explanations of their Open Call projects:

Urban planning questions

"The series questions several subjects that have an important place in my thoughts as an urban planner and photographer-author: the **presence of water** and agriculture; developments in individual housing; industrial heritage and its appropriation; the **legacy of social housing** neighbourhoods."

Place-based stories

"Four **stories** that resonate with the four places identified during the Caravane, varying the angles of view: **futureology, heritage, scientific.**"

Evocative histories

"We collected the voices of former COFPA **factory workers**. We broadcast this sound creation in a felt cabin which evokes the presence of wool and felt in these old factories."

Place-based relationships

"I work in collaboration with a photographer, and we wanted to highlight the population who occupy the heritage places that certain metropolitan trails cross. We wanted to ask them questions about the **relationship they have with the place they occupy**. We chose these places because they all had a link with the garden."

Fictional futures

"The 'Dismantling!' is an installation covering the **Lafarge factory** and its territory. Combining photographs and sound stories, the piece projects us into a **fictional future** where the place has become a park on the themes of the old cement factory and destruction."

Dance performance ritual

"Creation of a walk/**dance performance ritual** around building 87 of the **foundry** in Ruelle-sur-Touvre."

Exploration notebook

"With the perspective of a **fictional archaeologist** who knows nothing about our world, I produced around twenty pages of an exploration notebook mixing **observation drawings** and archaeological extrapolation."

Comic fiction

"A **science fiction comic book** set in a world where only a few human groups remained after the fall of an extraterrestrial meteorite on the **town hall**. In this world, artists are forced to rebel to save their works, considered a raw material for the manufacture of electricity."

Table 5: a selection of artists' explanations of their Open Call projects (first Open Call)

*"[I learned] to **link fiction with the territory** and to situate a plot in a heritage context."*

Comic author

*"[I learned about] **mixing fiction and historical data.**"*

Photographer and sound production

Additional “co-benefit” outcomes:

Increased inclusion of cultural stories in the CCI sector's products

Caravane members offered numerous proposals for future culturally-inspired innovation, from escape games to frescos to drone videos and more (see Table 4 below). Whilst it is too early for any of these to have been developed further, they illustrate ideation generated by networking and points of interest on the Caravane trail.

Drawing

- **Sketchbook** to mark the route and unusual places between the city of camps, that of edibles and the two Queens

Participatory

- A **major investigative work** on the Champ de Maneuver with residents, murals, playful diversions, short films
- An idea focused on the **water cycle** in the environment: couple it with imagination, a civilization more in harmony with the waterways... secret passages, water tunnels, hidden rooms...

Photography

- A photo series on **landscapes**, how the places were previously

Performance

- A choreographic creation to take the time to listen and look differently, resonate with the space, enter into a **relationship with ancestors** (rebuild the link)
- Sound or **theatrical hike** on local history

Sound

- **Sound walks** - projection towards a desirable future reconnecting with the past activities of these spaces.
- A **sound tour** - allowing the walker to have an interpretation of these elements of common heritage
- **In situ podcast**, activated via a flashcode, present at each point of interest. The character of the production could be historical or purely artistic

Expos

- Exhibition on the places and their past (scenes of life)
- Multimedia exhibitions in the “Baux de Provence” style **quarries**

Books

- A **children's story** about a pike who lost his teeth
- A **historical fresco** on the rebirth of activities that have now disappeared
- A **thriller** in the genre of Jean-Claude Izzo in Marseille
- A book of stories that mixes **historical facts** and legends

Comics

- An **eco-fiction** comic book around a river
- A **sci-fi ballad** where nature has invaded the places and humans wander local places in search of resources (the dovecote, lake tavern, building of the last ride, anti-nuclear shelter, wash house etc)
- A prospective sci-fi comic with a **botanical dimension**
- A sci-fi comic in which buried places are **rediscovered** and exploited differently

Plastic art

- **Still life** based on elements found on a site, wild plants
- An interactive and **collaborative map** around industrial architectural and cultural heritage.

Construction

- A floating structure on the Charente providing a viewpoint / **resting point**. With a geomagnetic study and social design
- Fictional constructions (huts but not habitable) behind the crossroads
- Rehabilitation of the **Lafarge** site
- Work on public space in the **solar house district**

Movies

- Documentary on the **Lafarge** career
- Solarpunk animated film about the anticipation of the semi-wild or **permaculture reappropriation** of abandoned places, such as quarry or railway wastelands
- A "bird's eye" **video by drone** through the territory, through the eyes of an animal (bird or land)
- Historical or fictional films to watch on your phone
- A **documentary** about local personalities, residents
- A video about birds and how they inhabit the territory
- A **music video** filmed in the dovecote

Games

- A **video game** that would tell love stories among a group of hiking researchers
- An **escape game** to mobilise young people

Table 4: a selection of proposals for heritage-inspired innovation from the Caravane participants (N.B. ideation stage only)

SPOTLIGHTS: SPECIFIC CITY ASSESSMENTS

5.1.5. Entrepreneurs' behaviour change (Lisbon)

N.B. each city conducts more evaluations than the snapshot presented here - see their D5.3 Evaluation Reports at <https://hubin-project.eu/library> for more findings and context.

ACTION 2: "DE-INCUBATOR"

"Decentralised & Dematerialised" Incubator for Innovative Projects

Key metadata

Action theme	Acceleration programmes/challenge calls Art and creativity
Action clusters	Cultural and Creative Industries New Lifestyles
Expected outcomes <i>(city level)</i>	Accelerated growth for incubated entrepreneurs (revenues, jobs, etc)
Expected impacts <i>(programme level)</i>	2: new blueprints for regeneration with enhanced wellbeing and quality of life (social) 4: cross-sector collaboration, job opportunities and skills (economic)



Operational results

The acceleration program for new businesses is one of the ways in which we intend to implement a positive change in the territory. With the aim of providing support for the creation and development of innovative, creative and sustainable projects to respond to the following challenges:

1. Safeguarding Intangible Cultural Heritage

How can we recover, use and transform the cultural heritage elements of these neighbourhoods, using new business concepts, new technologies and new production approaches?

2. Promoting the territory's economic and creative fabric

How can we revitalise traditional commerce and create synergies between creative industries, traditional/local commerce and tourism?

3. Sustainable tourism

How to make tourism more sustainable, based on local experiences that promote cultural heritage and create added value for local communities?

4. Environmental sustainability

How can we bring more energy efficiency and autonomy to the neighbourhood, improving the population's quality of life and reducing the carbon footprint?

5. Accessibility, Facilities and Mobility

How can we create solutions to the challenges of accessibility, mobility and the establishment of community life (sporting, cultural, etc.), which can be transformed into sustainable businesses with value for the community?

The open call was launched on 21th July, 2023 and the period for submitting applications ended on 12th November, 2023. 45 ideas/projects were received from national and international applicants, teams or individuals, at different stages of development and not always aligned with the challenges of HUB IN.

Candidates from 8 different nationalities, ranging in age from 22 to 68, with different backgrounds - student, retired, cook, ceramist, medical doctor, and more, were submitted to a bootcamp on December 8, 9 and 10 (see Figure 13).



Figure 13: bootcamp co-creation sessions

The De-incubator led to nine projects using local tangible and intangible heritage as the driver for entrepreneurial innovations. The products and services that were developed drew on / added to key ecosystem elements of the framework for “what makes a HUB-IN place”.³¹

Entrepreneurial culture / channels	Networks	Heritage	Physical (and digital) infrastructure
<ul style="list-style-type: none"> • physical sample boxes • online sales platforms • events • food festivals • multidisciplinary artistic residencies • physical Social Mosaic walls • ceramic workshops • community gatherings / dinners 	<ul style="list-style-type: none"> • local artisans • art collectives • residents • tourists • social curators • creative producers (cooks, tour guides, sculptors, surgeons) • people with mobility and visual impairments 	<ul style="list-style-type: none"> • food and film • ceramics • the HUA territory • stories of residents about their lives • stories of visitors • “disappearing secrets” and stories behind the names of the neighbourhood's streets 	<ul style="list-style-type: none"> • digital repository for heritage information • QR code technology • information boards • street furniture • digital sales and customer engagement platforms

Table 4: the contributions of the products / services to HUB-IN ecosystem elements

*“These events benefit the neighbourhood by creating a **platform for local talents to showcase their work and generate income**, while explorers gain a richer experience and lasting memories. Both organisers and participants benefit from a focus on core strengths and mutual promotion, creating a circular economic model.”*

Participating entrepreneur

*“**Consumers discover unique local products while supporting small businesses.** The project adds plus value to artisans with [its] tools... many different projects have opportunities to express their story.”*

Participating entrepreneur

*“The creation of this social, empathetic and innovative project was **born out of a conversation on the Colina do Castelo.**”*

Participating entrepreneur

³¹ https://hubin-project.eu/wp-content/uploads/2023/10/HUB-IN-Framework_V1.1_Feb2023.pdf



aRoundtheNeighborhood

A digital platform for exploring routes of the Intangible Cultural Heritage in Colina do Castelo - fading secrets and stories are made re-accessible in seconds, allowing people to experience the history, community and atmosphere of the neighbourhoods



Beam me up to

Experience Boxes, Gatherings and Cross-Cultural Film Feasts offer a curated taste of the neighbourhood for explorers and deeper connections than traditional tourism - plus new sales platforms and customer bases for featured artisans



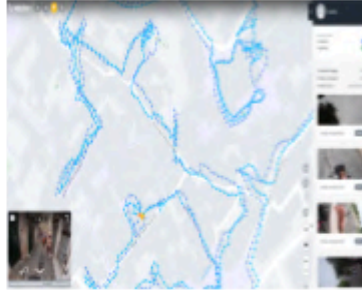
Conversational Kiosk

Ceramics workshops, interviews and community dinners that open new channels of communication and collaboration between residents and tourists - through conversations that start from different points of view on the preservation of cultural heritage for Colina do Castelo



Convidarte

A team of social curators (cook, tour guide, sculptor, surgeon) merging pieces of tiles with the lives and stories of residents and visitors, giving colour and new meanings to the Social Mosaix. Compatible tourist routes and web app to organise tours



Intermodal

A map of accessible routes, made available in open data format for people with reduced mobility - optimising routes and involving the community is a key point for inclusive living.



Palácio das pipocas

A service that aims to open the doors of houses in Colina do Castelo to welcome travellers who are accompanying a family member undergoing temporary hospital treatment and have nowhere to stay.



PLAY(THE)GROUND

Multidisciplinary artistic residencies bring together artists and community to create projects based on the experience of local territory and heritage (material or immaterial). Learnings are shared with knowledge and innovation centres



Unspecial Tours

A service to create conditions so that blind, special needs and mobility-impaired people can visit and experience tourist destinations and cultural heritage to the full, not as special people!

Angelina na Colina

A research project on loneliness. Observations were made and shared with colleagues (however during the accelerator programme no products or services were ideated that could respond to this problem).

Figure 16: the projects supported by the accelerator

Outcome: Accelerated growth for incubated entrepreneurs

Skills in heritage-based innovation, business and participative design

In general, a positive shift can be seen in participants' perceptions of their skills in heritage-based innovation, business skills and participative design. See Figure 26 which compares pre- and post- scores based on a rating of 1 (very low) to 5 (very high). Seven did not respond.

The presence of low scores in all skills before coaching validates the programme design to some extent, i.e. that these were indeed relevant skills to provide mentoring and coaching for the entrepreneurs.

The highest growth can be seen in "entrepreneurship and innovation that is environmentally sustainable" - despite over half scoring themselves "mid", "low" or "very low" before support, the entire 100% score themselves "high" or "very high" after support. This may suggest that environmentally sustainable innovation is (now) at least a partial skill set in the supported entrepreneurs, equipping them to support HUB-IN's Cluster of "Resilient and Human-Connected Places".

Two other skills shifted positively to having no low scores at all after the support (despite beginning with "low" or "very low"), and both are highly relevant to HUB-IN's missions on participative design and heritage-driven innovation:

- Co-creation with local communities
- Entrepreneurship and innovation that preserves or exploits cultural heritage. During the acceleration programme, the pillars of sustainability and cultural heritage were present in all the activities.

Out of all 7 skills targeted, only one appears to not have had clear improvements - "prototyping and testing" saw a slight broadening of those who rated their skills as "mid", and this may be worth exploring further for future accelerators. It was noted that there was some resistance on the part of all the participants to "getting their hands dirty" and prototyping and testing their ideas, and the results are representative of that - some came with the idea that prototyping was somewhat easy, but when they were urged to do it, they discovered the difficulties.

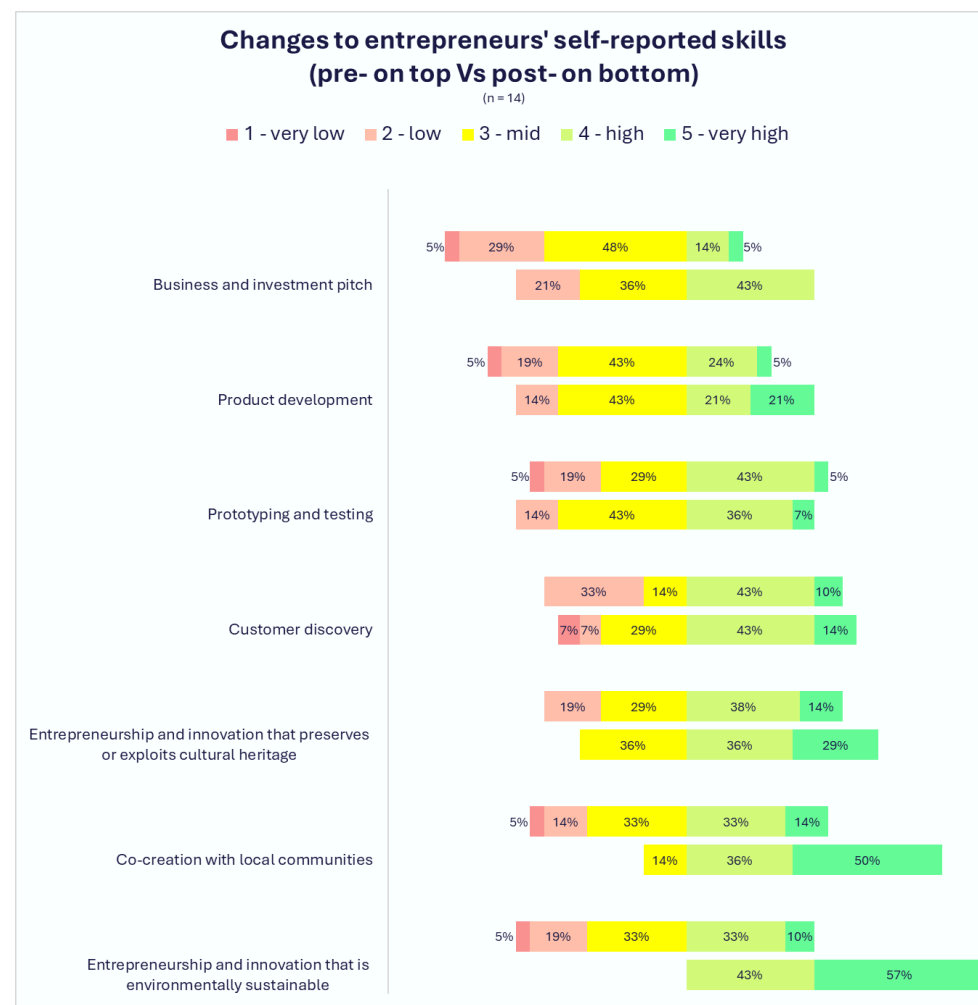


Figure 26: changes to entrepreneurs' self-reported skills, based on pre- and post- surveys

Outcome: Accelerated growth for incubated entrepreneurs
Networking and skills to improve quality of commerce for local communities

The scoring of benefits by entrepreneurs aligns with the intended programme design. Of the various topics covered in the acceleration programme, the ones considered by the entrepreneurs to have brought the most benefits to them were the activities that focus on understanding the end users, access to new locations for projects or prototypes, access to partnerships and new ways of working.

In fact, there was a strong focus on these issues: user-orientated solutions, the importance of experimentation and validation, the creation of partnerships and the implementation of co-creation processes, and this approach was considered an asset for the participants (Figure 27).

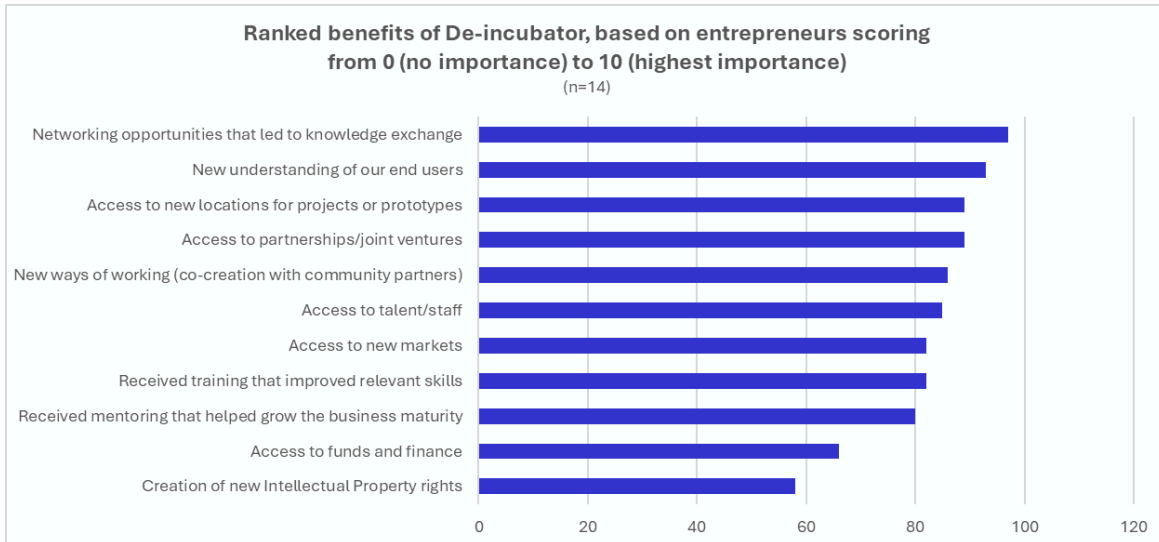


Figure 27: benefits obtained from the acceleration programme in order of importance, based on entrepreneurs assigning 1-10 scores to each (0 = no importance, 10 = most importance)

*"The programme enabled us to **establish contacts** and partnerships, to get to know new spaces for the activities we carry out and projects we want to pursue. Some of the training sessions were important, and the **sharing of knowledge** between other teams was one of the programme's strengths."*

Participating entrepreneur

*"The acceleration programme allowed me to **understand how to build a project** from scratch and all the implications necessary to make it a reality. My knowledge of entrepreneurship was practically nil."*

Participating entrepreneur

*"It was a participation that we consider to have been **very successful**. From the first bootcamp to the testing phase."*

Participating entrepreneur

*"During the acceleration programme we were able to **strengthen local partnerships**. These partnerships enabled us to draw up an application for DGARTES funding in 2025, with the project's sustainability in mind."*

Participating entrepreneur

Outcome: Accelerated growth for incubated entrepreneurs

Jobs, revenues, exports etc

The accelerator focussed on small and solo entrepreneurs innovating products and services at an early state of maturity, and so as expected the pre- and post- accelerator surveys revealed that is it too early for any detectable uplift in revenues or jobs supported. The city has surveys that can be repeated annually with the entrepreneurs in order to track any evolution over time.

Additional “co-benefit” outcomes:
Increased preservation and exploitation of cultural assets

The accelerator has encouraged some new behaviours regarding heritage-based innovation and the HUA: over 80% of the entrepreneurs indicate they plan to use cultural heritage in future projects or products, and just under 80% plan to form business partnerships with organisations they’ve met through the process.

There is no strong intention however to locate the main business operations in the Colina do Castelo, but the programme is understood to have successes in supporting business partnerships and quality of commerce for local communities, by increasing business operations in the Colina do Castelo and prototyping new projects or products in the Colina do Castelo (see Figures 29 and 30). Further, it is understood that the projects by their nature don’t need to have a physical space on Colina do Castelo, so their headquarters could be elsewhere where the rents are more affordable, and they could be implemented in other areas of the city.

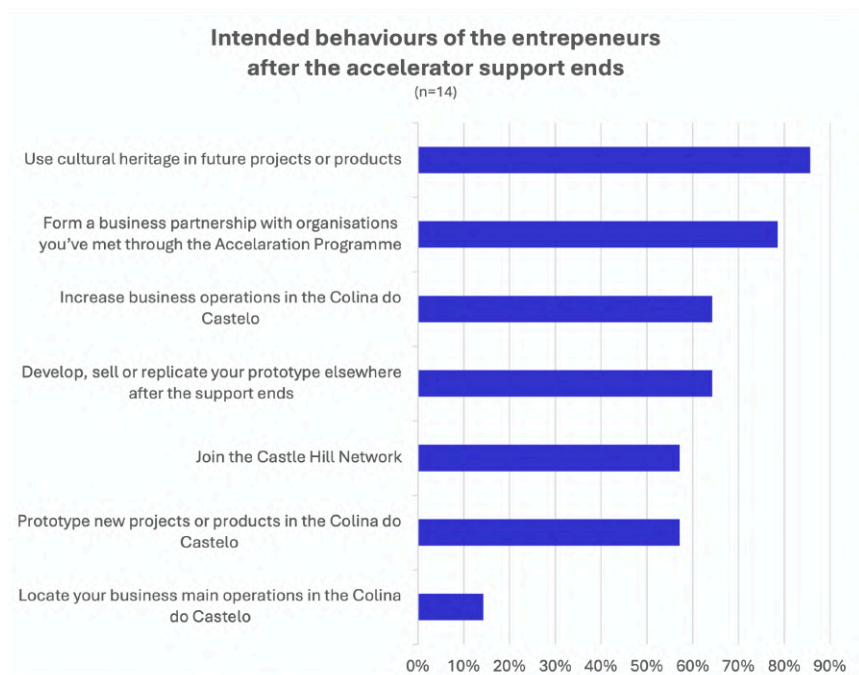


Figure 29: intended behaviours of the entrepreneurs after the accelerator support ends, all entrepreneurs participating could tick all that apply

*“We **developed a solid team** of four highly committed, knowledgeable, skilled, harmonious co-creative partners.”*

Participating entrepreneur

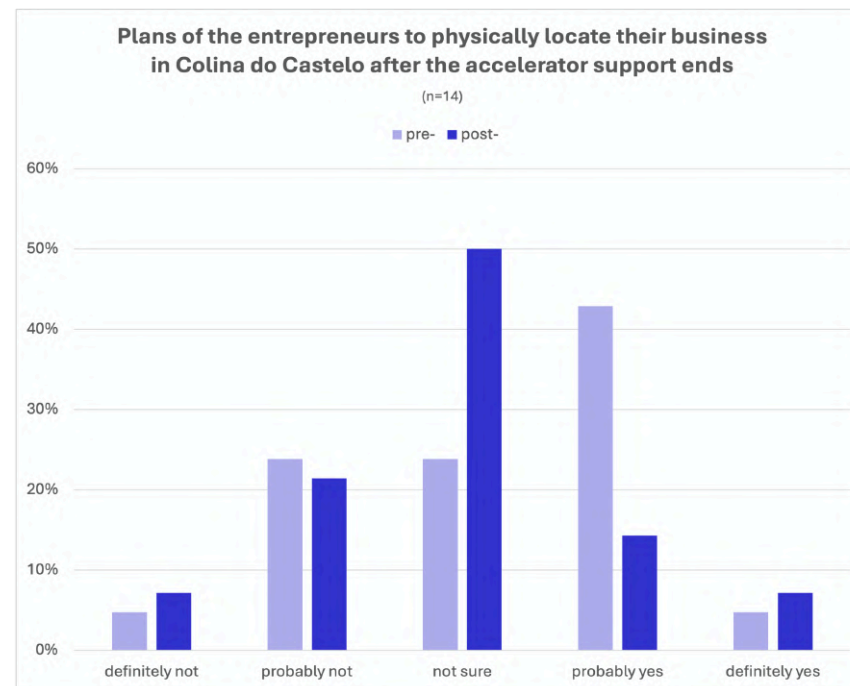


Figure 30: plans of the entrepreneurs to locate their business in the Colina do Castelo

*“It was a challenge that allowed us to **immerse ourselves in unknown territory.**”*

Participating entrepreneur

Final testimony from one of the acceleration programme entrepreneurs

"My participation in the HUB-IN Lisbon programme was quite unexpected. Initially, I didn't have much idea or expectation of what the experience would be like. Since the bootcamp I realised that the journey was going to be unexpected, which is a huge plus for me.

*At the bootcamp I started by deconstructing my original idea to create something new with three strangers. In itself, this experience was **incredible and highly empowering**. As a team we overcame very challenging moments of constructing and deconstructing ideas, concepts and even boundaries. I would say that throughout the programme we **tested many limits as a team**.*

*The **support was absolutely exemplary**, we never felt alone and we always received support and feedback for the smooth progression of the project. In the most challenging moments, we were given the **opportunity to reflect and find a new path**, to rethink and rethink concepts and paths, always well supported by highly interesting, qualified mentors who were enthusiastic about our ideas.*

*I must stress the **extraordinary quality** of all the people who accompanied us throughout the programme. Two other points that I consider to be very positive were, on the one hand, the very flexible structure that allows each project to develop at its own pace, responding to completely different challenges and, on the other, the existence of strategically planned workshops according to the necessary stages of the projects' maturation, that **allowed us to acquire a rhythm and confidence** that helped us take the project to the stage we wanted to be at.*

I really enjoyed the experience. It was something completely new for me! As they say, there's no love like the first... I don't know if I'll take part in other programmes in the future, but I'm sure this one will be unforgettable! My heartfelt thanks to everyone who gave us this experience and my admiration for the incredible organisational work and support offered to all the participants!"



SPOTLIGHTS: SPECIFIC CITY ASSESSMENTS

5.1.6. Public event attitudes and demographics dashboard (Nicosia)

N.B. each city conducts more evaluations than the snapshot presented here - see their D5.3 Evaluation Reports at <https://hubin-project.eu/library> for more findings and context.

ACTION 2: HERITAGE WALKS AND THEIR TWINS

Key metadata

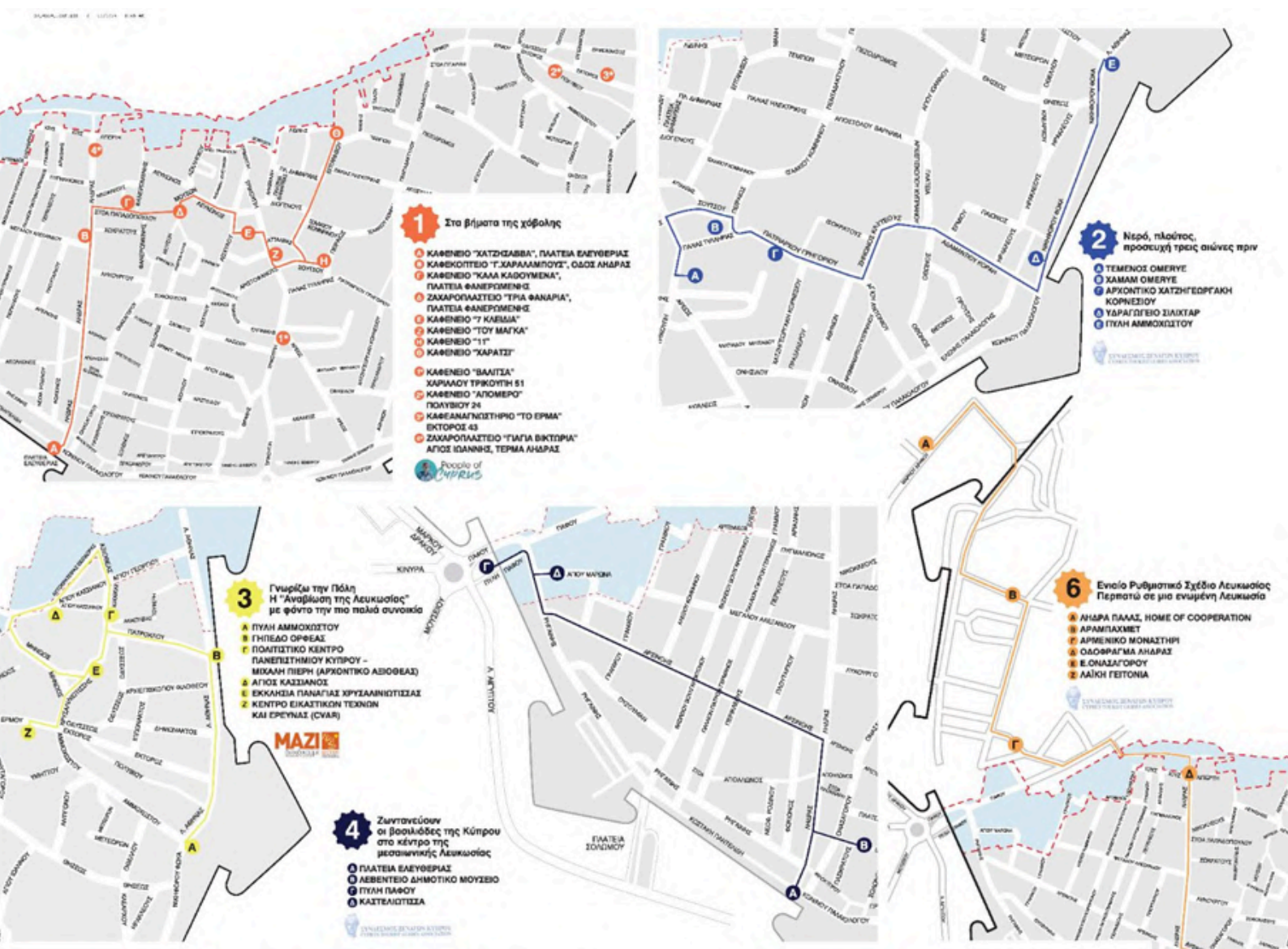
Action theme Art and Creativity

Action clusters Cultural and Creative Industries

Expected outcomes (city level) Improved knowledge of the HUA's history for residents, visitors, tourists

Expected impacts (programme level)

- 1: reversing abandonment and neglect of historic heritage (cultural)
- 2: new blueprints for regeneration with enhanced wellbeing and quality of life (social)
- 4: cross-sector collaboration, job opportunities and skills (economic)



Operational results

Action 2 “Heritage Walks and their Twins”, launched on March 1st 2024, and continued until mid-June of the same year. Almost every Saturday within that period, five out of the ten Walks that the local representatives of the project (Nicosia Municipality and Cyprus Energy Agency) had approved, were offered to the locals and visitors of Nicosia’s HUA at no cost (see the original plan in the screenshots below).

The aim was that through these Walks the different cultural and creative elements of both tangible and intangible heritage of the city’s historic urban area would be highlighted, increasing its attractiveness and hopefully leading to increased visits and enhanced use of soft mobility / active travel.

Now that the Action is complete, the Walks’ maps will be digitised and embedded to Nicosia’s Digital Twin along with photos and information about the landmarks, for everyone to follow.

The ten Walks were:

Getting to know the city:

The timelessness of education

Friends of Nicosia (NGO)

Getting to know the city:

Transformations from the Middle Ages to today

Friends of Nicosia (NGO)

Getting to know the city:

The “Revival of Nicosia” with the background of the oldest district

Friends of Nicosia (NGO)

My Nicosia:

From its multicultural past to its multicultural future

Marios Antoniou (peace educator)

The kings of Cyprus come to life in the centre of mediaeval Nicosia

Cyprus Tourist Guides Association

Stage & Screen

Antigone Heraclidou (historian and People of Cyprus), Iliana Koulafeti (historian and heritage expert)

Heritage & Society

Costas Mavrokordatos (architect), Maria Mavrou (civil servant)

In the footsteps of the embers

Iliana Koulafeti (historian and heritage expert), Christos Michalaros (Journalist and People of Cyprus)

Water, wealth, prayer... three centuries ago

Cyprus Tourist Guides Association

Nicosia MasterPlan: Walking in a united Nicosia

Cyprus Tourist Guides Association

Process evaluation

A good mix of individuals and groups identified as key stakeholders for the action were involved in the design of this activity. This included a historian and a cultural heritage expert (also members of the group “People of Cyprus”), two professional tour guides (members of the Cyprus Tourist Guide Association), a peace educator, an architect, a civil servant, and some members of the non-governmental organisation “Friends of Nicosia”.

The potential guides of the Heritage Walks were recruited through a targeted invitation process, instead of an open call. That was primarily done to meet deadlines in receiving and evaluating the proposed Walks, also to cover specific areas of the HUA's tangible and intangible heritage, done through diverse backgrounds - meaning we did not limit ourselves to professional tour guides, as it is usually done.

A diversity of 15 local professionals, experts, and old Nicosia-lovers were invited, and eventually, six of them submitted ten proposals in total. The Walks reached some of the target audiences, i.e; the wider public of Nicosia (with a good range of age, and residency, including people with disability), creative entrepreneurs, local businesses, schools, institutions, managers of cultural venues, etc.

More than 1,000 citizens registered for the various Heritage Walks and a good percentage of 75% attended at least one of them. It is worth mentioning that many of them returned to attend other thematic walks on the same day, or on another Saturday. The Heritage Walks have reached some of the target audiences such as the wider public of Nicosia with a good age and location range, creative entrepreneurs, local businesses, schools, institutions, managers of cultural venues.

In contrast to pre-existing tours in Nicosia, these walks were coordinated by the Municipality, which empowers stakeholders to be engaged in a very active way in the process and project. Before this intervention, the guided tours in the city were mainly organised by other stakeholders, more or less formal. Thus, this action appears as the first programmed and organised effort to run such activities coming from the Municipality. That was one of the comments received from our guides when evaluating this Action and their overall experience from the project - that this initiative is very fresh and much needed for Nicosia, not only because it promotes its history and culture, but also because of the diverse thematics it touches upon.

In early monitoring sessions, the Nicosia Hub team explored the use of any pre-existing footfall sensors or tourism data to understand changes in footfall through pre- and post- or control- and experimental-area studies. However, there are some barriers in terms of drawing insights from sensor data or tourism data that apply to areas, geographical scales and collection periods that are too distinct from the HUB-IN Heritage Walk routes. Thus, pre- and post- surveys issued to trial guides and participants serve to provide insights in line with their Theory of Change for how footfall can be driven (a more attractive area, inclusive and unique experiences etc). See D5.2 Monitoring Methodology³² for more details.

³² <https://hubin-project.eu/library>

Outcome: Improved knowledge of HUA history for residents, visitors, tourists

Heritage Walk respondents were mostly female, under 55 and from outside the HUA. Typical visitors might spend 1-3 hours in the HUA (77%), excluding the walk. Whilst the walks were not directly targeted at increasing spend, about 40% spend nothing, 60% “less than €50” and 1% more than €50 on a typical visit.

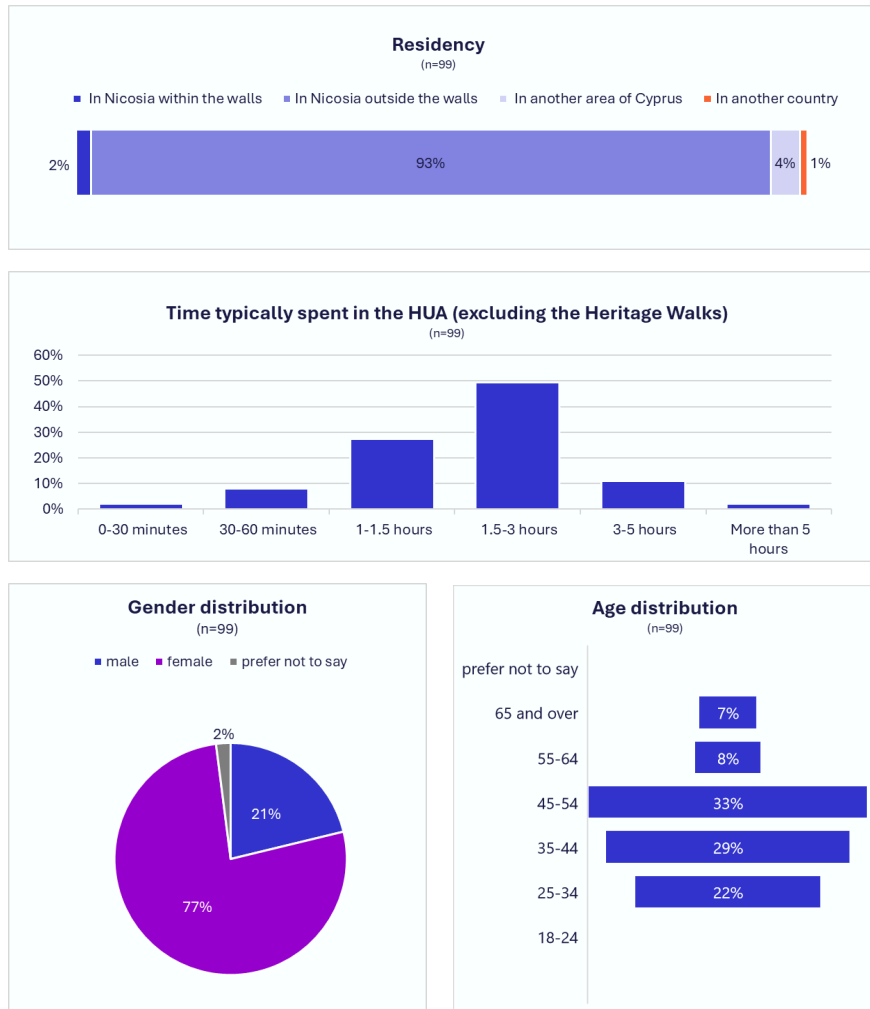


Figure 2: demographics of the walker respondents

Out of 1,186 walkers, 99 respondents returned a post-walk survey (8%), giving some partial insights into the demographics and validation of the walks. Insights are shared below (see Figure 2, N.B. limitations on sample size).

A majority from outside the HUA, yet inside the city (93%), suggesting that any resultant benefits (such as gains in awareness of heritage or CCI) will disseminate and be retained locally rather than to tourists who take any new knowledge away when they leave. 5% of respondents do class themselves as resident either outside Nicosia or in another country.

A mainly female base, with almost 80% women. Almost exactly half are below 35 and half over, with every age range reflected by respondents except 18-24 (children were not surveyed). Overall, the vast majority (90%) are younger than 55, perhaps given the exercise requirements and some challenges with street accessibility (see below).

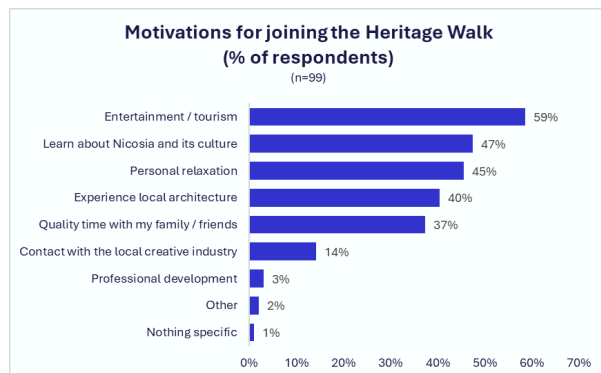
The walks demonstrated some ability to attract new visits to the HUA that day, as only 25% of respondents stated that they would have visited the HUA regardless of the Walks: the remaining 75% would either have visited somewhere else in Nicosia, somewhere else in Cyprus or stayed home. Interesting are also the results drawn from the pre-questionnaire participants had to fill during registration, which highlight the need for such an Action within Nicosia HUA, and confirm that the goals set have been reached.

According to them:

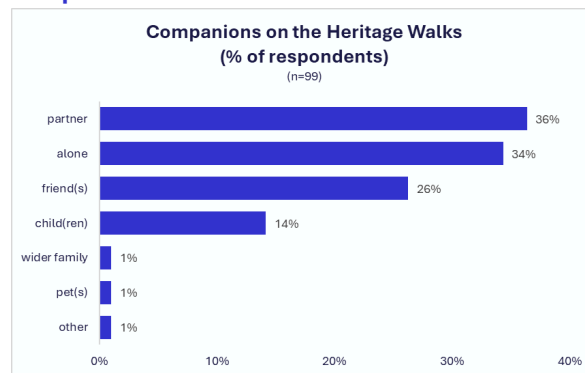
1. *there is insufficient knowledge about Nicosia's history and culture (~60% know very little about it)*
2. *people visit the area sporadically during the year (~60% visit the area a few times per year)*
3. *walking in the area is limited (~40% walk in the HUA a few times per year largely because of constraints, such as the narrow pavements, the heatwaves, and the lack of adequate infrastructure)*

Most are not initially motivated by meeting creatives but do later report that as an important aspect, as well as new behaviours inspired by the walk, for example telling family and friends about the walk, participating in more local HUA initiatives, visiting the HUA more often etc:

Motivations



Companions



Behavioural change



Interesting insights from the post-walk survey include that the majority of those registered to the Walks joined for some personal entertainment (59%), to learn about Nicosia and its culture (47%), for personal relaxation (45%), to admire the local architecture (40%), and for quality time with family / friends (37%). Respondents could also have multiple motivations - each having more than two motivations on average.

Relevance to replication / scaling: “contact with the local creative industry” is not high on visitors’ motivations (14% identifying it), yet feedback identified “promotion of CCI” as important *after* the Walk. Walk organisers can consider whether contact with creatives should be emphasised as an attraction, or if it has maximum impact as an unexpected discovery for walkers.

The walks were most attractive to couples and solo-walkers (36% and 34% of respondents respectively), though there is also a family element to them too: more than one in ten adults were there with their children (14%). Respondents could also select multiple companion types - on average about one in ten walkers was with multiple types (e.g. friends and family; or partner and children).

Relevance to replication / scaling: some interest expressed in the respondents’ feedback for family-friendly walks. And more accessible walks - Nicosia’s city-centre has small and narrow pavements, which makes it difficult for people with disabilities to visit and therefore join the walks. Actions on behalf of the Municipality are undergoing towards solving this issue and promoting inclusivity.

A high proportion of respondents stated that the walks motivated them to participate in more local events and initiatives (54%), dive deeper in Nicosia’s history and culture (49%), visit the city within walls more often (35%), support local businesses and artists (23%) (which happened to some extent during the walks, according to respondents) and interact further with the local community (30%) meaning to develop synergies and grow networks.

Relevance to replication / scaling: the most reported behaviour inspired is to tell friends and family (about 3 out of every 4 walkers) suggesting walkers may become willing disseminators of knowledge gained on the walks, with word-of-mouth more important than posting on social media (2%). Ideally, this can be used to encourage others to visit the walks, thus expanding their reach.

Figure 3: motivations, companions and inspired behaviours of walkers (N.B. respondents may select more than one option, so the totals will show greater than 100%)

Walk respondents also demonstrated an overall positive change in key benefits:

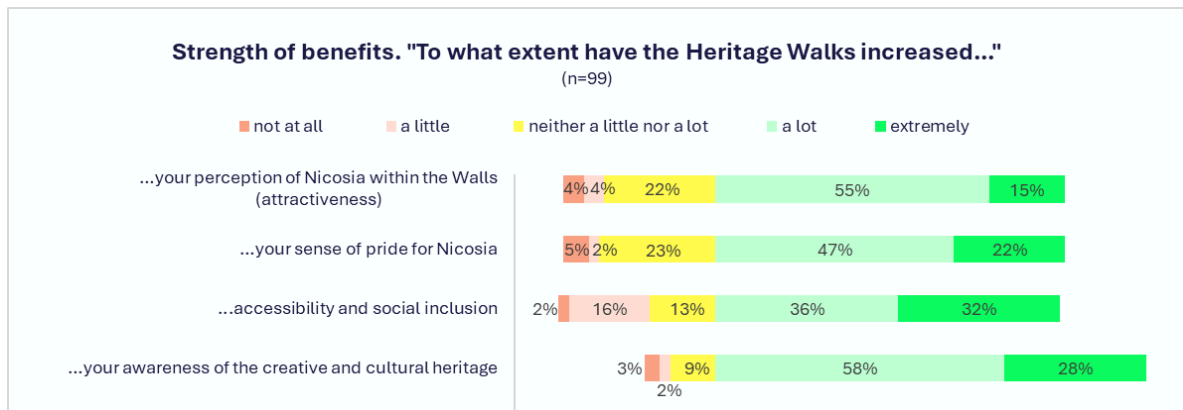


Figure 4: strength of benefit from the Heritage Walks

Main findings from the Hub team on Figure 4 include the below, with key drivers of the change attributed to the strong sense of community-based storytelling and the diversity of Walking Guides' background:

- Positive changes to respondents' perception of Nicosia and its cultural heritage** thanks to the Walks, and their sense of pride has increased dramatically (based on the post-walk evaluation survey). According to the same survey, the Walks indeed helped enhance city-visiting and promote social interaction within the HUA, also in promoting the Cultural and Creative Industry in the area. About 1/10th of the participants of the walks completed the post-evaluation survey (99 respondents out of 1,186 walkers).
- Increased walking opportunities in the old town of Nicosia, combined with storytelling.** The walks were nothing like the usual city-tours we all know. The interactivity and theatricality infused in the majority of them were the elements that stood out and caught the attention and interest of those that finally participated. For instance, qualitative data from the post-walk evaluation, refer to the walks "The Kings of Nicosia" and "Nicosia's MasterPlan", whose theatricality was reported to the Hub team as an absolute joy for kids and adults alike. Increased visiting is also confirmed from the expected behaviour changes as can be seen above in Figure 3.
- Increased visibility of Cultural and Creative Industries.** Landmarks of the Walks included many cultural and creative institutions in the area, thus participants could learn about them and come back for them, on another day, after the walk. 86% of those who participated in the post-survey reported their awareness of the Cultural and Creative Industry of the area increasing "A Lot" or "Extremely". Whether this translates into sales and revenues for the local CCI remains to be seen in the medium-term: about 1 in 4 walkers (23%) said that the Walks inspired them to support such businesses in Nicosia HUA (see Figure 3).
- Increased sense of community participation.** Insights from the post-evaluation survey show that the participants were inspired to participate in more local events / initiatives in the HUA (54%), to dive deeper in Nicosia's history and culture (49%), to visit the Nicosia HUA more often (35%), and to support local businesses and artists (23%) (awareness of Creative and Cultural Industries is the highest ranking benefit in the eyes of the respondents per Figure 4), and interact further with the local community (30%) meaning to also develop synergies and grow their network (see Figure 3).
- Increased sense of pride.** According to the post-evaluation survey, 47% and 22% felt that the Cultural Walk had affected their sense of pride in the walled city of Nicosia "A Lot" and "Extremely" respectively. This benefit scores fourth overall in terms of importance to respondents, after awareness of culture, awareness of CC and accessibility / social inclusion.

- Increased accessibility to different groups of people.** According to the post-evaluation, 36% reported the Heritage Walks increasing the accessibility and social inclusion “A Lot”, and 32% reported “Extremely”. This statement is also supported by the demographics section above, which shows a diversity in gender, age and residency among the participants. It is worth mentioning that a special walk was also organised towards the end of this activity, addressed to deaf people/people with hearing impairments.

*“I got to know **places I didn't even know existed**. I will go again with family / friends.”*

Walker

Some low or neutral results were also received about the benefits - including for accessibility which drew the most lowest scores (18% in total for “Low” or “Very Low”, see Figure 4 above). This is supported by some qualitative comments relating to infrastructural challenges (narrow pavements etc) that hinder easy accessibility.

*“**Nicosia “lags behind”** quite a bit in terms of accessibility for people with disabilities and more specifically for people in wheelchairs. As a tour guide, I don't have many options for where to take and guide people in wheelchairs. Sidewalks, paving, entrances, etc.”*

Tour guide

*“The route to some distribution points is **not accessible** for people with mobility problems.”*

Walker

The Walks may have potential for attracting and stimulating visits to the HUA: 3 out of 4 walkers would not have visited the HUA if the walk had not been happening. Only 25% would have visited the HUA regardless; 10% would have visited elsewhere in Nicosia (i.e. displacing visits from other parts of the city; 19% would have visited elsewhere in Cyprus, and most of the rest (43%) would have simply stayed at home.

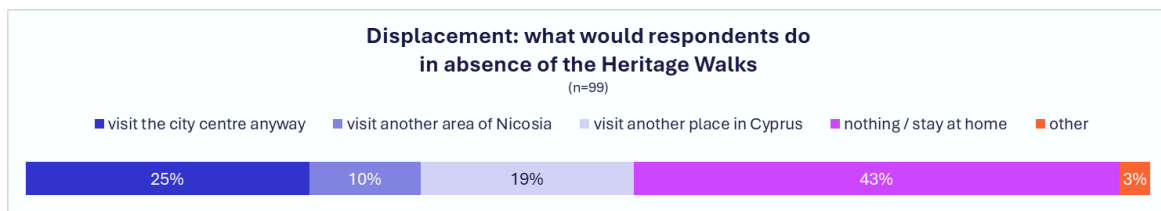


Figure 5: extent to which the walks “displace” visits from other parts of Nicosia / elsewhere

The walkers' experiences suggest positives and challenges across the Entrepreneurial Ecosystem of a HUB-IN place.³³ Any Action is expected to have differing views amongst participant, and these offer useful areas for consideration in future replications and scaling:

Leadership: political tensions can be stimulating, or create uncertainties needing actively managed

"There was no information about the necessary **possession of an identity card** [to enter the occupied area of Nicosia]."

"I benefited from an update on **historical events** that I was not aware of"

"[What was negative was] frequent references to **political events** which could be said otherwise without conveying the **personal beliefs** of the creators of the walk."

"[I benefited from] familiarity with historical areas in the **occupied area** of the city."

Urban Culture: inclusivity can be strengthened by building on the family-friendly aspects

"[I benefited from] engaging my **eight-year-old** in an interesting and educational activity."

"We came into contact **as a family** with aspects of the Cypriot history that we were not aware of."

Knowledge: residents may discover places they didn't know, but some scepticism may also be present

"I got to **know my city better** and loved it even more."

"[I benefited from] **socialisation**, pleasant moments with interesting people, **education** in culture."

"I got to know places I didn't even know existed. I **will go again with family / friends.**"

"We learned about things and places that we **wouldn't have learned about** otherwise."

"I think that the said walk had **nothing interesting** and new to offer to the average Cypriot and more specifically to the average resident of Nicosia who has taken a walk or two in the city. More interesting information was needed. It's a worthwhile venture, but I think it needs more work and research to win over participants."

"It was interesting because it didn't repeat things we already knew. It was also interesting because it was **interactive.**"

"I got to know the **beautiful old town** of Nicosia better."

"Unfortunately this walk was a **failure!**"

Heritage: walkers appreciate learnings about building exteriors, but also desire to enter inside

"I **noticed buildings** and historical places whose history I did not know."

"[A disadvantage was that] there were no guided tours **inside the buildings.**"

Physical Infrastructure: accessibility constraints may need addressed for those with disabilities

"The route to some distribution points is not accessible for people with **mobility problems.**"

"It would be difficult for people with **disabilities.**"

³³ <https://hubin-project.eu/library/hub-in-framework-overview/>

SPOTLIGHTS: SPECIFIC CITY ASSESSMENTS

5.1.7. Accelerator lessons and Demo Day study (Slovenska Bistrica)

N.B. each city conducts more evaluations than the snapshot presented here - see their D5.3 Evaluation Reports at <https://hubin-project.eu/library> for more findings and context.

ACTION 2: CROUZET START-UP ACCELERATION PROGRAMME

Key metadata

Action theme	Acceleration Programme / Challenge Calls Co-creation and Community Engagement Art and Creativity
Action cluster	Cultural and Creative Industries
Expected outcomes (city level)	Improved business growth for the supported entrepreneurs
Expected impacts (programme level)	2: new blueprints for regeneration with enhanced wellbeing and quality of life (social) 4: cross-sector collaboration, job opportunities and skills (economic)

The screenshot displays the website for 'Crouzator', a creative incubator in Slovenska Bistrica. The main header includes the logo for 'Center za Kreativnost' and the European Union flag with the text 'EVROPSKA UNIJA EVROPSKI SKLAD ZA REGIONALNI RAZVOJ NAJLAŽJA V VAŠO PRIHODNOST'. A navigation bar at the top right contains social media icons and a 'Prijava kot Czk ustvarjalec' button. The main content area features a large banner for 'ODPRTI POZIV Pospeševalnik Crouzator' with a 'povezava' button and tags for 'DEDIŠČINA', 'OBLIKOVANJE', and 'RAZVOJ KKS'. Below the banner is a 'PRIJAVI SE' button with a deadline of 'DO: 12. 11.'. The right sidebar contains a 'PRILOŽNOSTI' section with a card for 'Pospeševalnik Crouzator' and a 'SORODNE OBJAVE' section with a card for 'Triennale rokodelstva / Razstava sodobnih in inovativnih izdelkov na temeljih kulturne dediščine'. The footer includes the text '0 POSPEŠEVALNIKU' and various partner logos.

Figure 4: online information published for the Accelerator call

Operational results

An Accelerator program was designed and a call for applications launched. Participants in the program have received a financial incentive, access to four thematic modules, and 10 individual mentoring hours with selected mentors.

In December 2023, the four selected applicants started their project implementation:

Recycled aluminium jewellery workshops

Danuška Hauptman

Recycled aluminium jewellery workshops, based on traditional metalworking techniques passed down from generation to generation. Materials come from a local aluminium factory (2kg/year), contributing in a small way to the local ecosystem and reducing impact on the environment (local transport of materials). Any unused material is returned to the factory for melting and production, establishing a zero-waste cycle.

These workshops not only promote eco-friendly practices but also provide a platform for artistic expression through wearable art, utilising materials sourced from our local environment.

Intangible Cultural Heritage Illustrations

Hana Nekrep

The project involves creating captivating illustrations that celebrate and preserve the essence of our cultural identity.

It is linked to cultural local heritage of the built environment such as Bistriški Castle, Jakčev Mlin, the Roman Quarry in Bistriški Vintgar, and cultural intangible heritage such as the white villas on Pohorje, the White Castle Lady, Vodovnik.

Historical House Facade Replicas

Natalija Sinkovič

Clay replicas of the facades of Slovenska Bistrica's most significant historical houses. These replicas, designed as tea-light holders, offer a unique way to showcase our architectural heritage within a contemporary context.

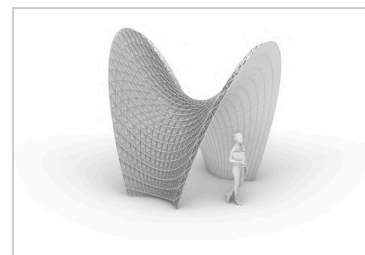
The product "Bistriške hiše" or "When the houses come to life" is related to cultural heritage, as all the manufactured houses are from this area. Together with the packaging and the attached description of the history of the house, they are intended as souvenirs or formal gifts.

Prefabricated scrap aluminium pavilion

Jure Kozmus, Hana Nekrep

Development of a 3D model of a prefabricated scrap aluminium pavilion, to raise public awareness about shared urban spaces often overlooked in smaller towns and stimulate thinking in the community about the future of space. By connecting the mediaeval HUA core with the aluminium industry, the project fosters a dialogue between cultural heritage and modern technology.

At the end of the programme, a showcase exhibition was organised where participants had the opportunity to present themselves and the products they developed during the accelerator programme. The event also served as a soft introduction to the refurbished co-working space, offering visitors a first glimpse into the space.



Process evaluation

The number of applications received significantly exceeded the Hub team's expectations. We received a total of 12 applications, out of which we selected four projects for further development. However, despite the high volume of applications, many did not meet the specified criteria outlined in the call.

This suggests that for future calls, we need to ensure that the call criteria are more clearly communicated and prominently visible. Additionally, we should encourage submissions that adhere strictly to call criteria to enhance the selection process.

Out of 12 applications, four entrepreneurs were selected as eligible for direct support. The balance was predominantly towards females in terms of gender (3 out of 4), and in the younger 25-34 age group (half) (see Figures 5 and 6 below). As targeted, the entrepreneurs represented a mix of experience and commercial status too, categorising themselves as: an independent entrepreneur, a community society, a group of individuals and a non-commercial individual.

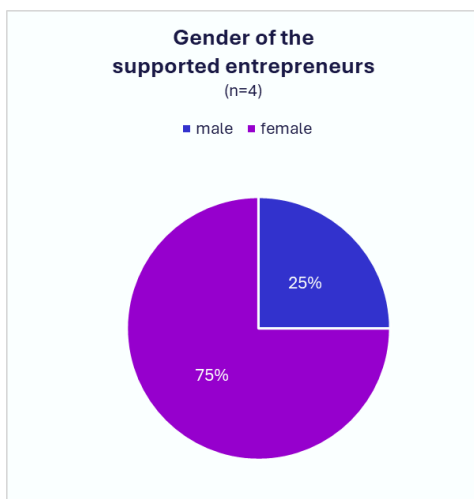


Figure 5: gender of the supported entrepreneurs

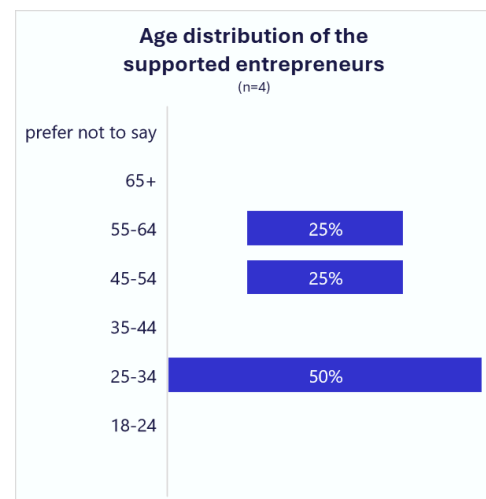


Figure 6: age group of the supported entrepreneurs

Pre- and post- Accelerator questionnaires were issued to understand changes in the entrepreneurs' attitudes, skills, behaviours, networks, and more. These results are presented below. As the programme is ongoing as at the time of the final HUB-IN reporting, the "post-" questionnaire happened during the Accelerator and thus the findings are considered interim.

Outcome: Development of a start-up culture and entrepreneurial mindset

Before and after receiving support, the entrepreneurs were given questionnaires scoring their agreement with three attitudes from 1 (strongly disagree) to 5 (strongly agree). See Figures 7 and 8 below for aggregate and individual scores of the four supported entrepreneurs - N.B. small sample size of four supported entrepreneurs.

The entrepreneurs champion very strong attitudes on local heritage's potential for innovation...

- "Local cultural heritage has untapped potential for entrepreneurial innovation": as per Figure 7, this remains completely unchanged with 100% strong agreement from all entrepreneurs before and after assessment, confirming a strong belief in the local heritage's potential for future innovation.

...but are less certain on the commercial models:

- "Local cultural heritage is a public cost (liability)": there was either disagreement or ambivalence with this statement prior to the Accelerator, indicating early perceptions that heritage does not definitely need to rely on subsidies or public costs to survive and thrive. All entrepreneurs maintained this score - with the exception of one who leapt from a view of Strongly Disagree to a Strongly Agree (the maximum change of +4 in Figure 8). As at time of this report, their product did not complete in a way that drew revenues, and this may drive a perception that success requires further funding - as connections with the entrepreneurs are maintained, the Hub team may be able to investigate and validate their feedback, and if any adaptations to future Accelerators could leverage their insights.
- "Local cultural heritage is revenue driver (asset)": this statement saw a decrease - initially all Strongly Agreed, suggesting positive expectations for the viability of their innovations. Two however changed their opinions, one slightly softening (but still Agreeing) and one making a bigger shift to Disagree - significant revenues were not expected by the end of the Accelerator given the short timescale, so it may be insightful to repeat this questionnaire in 1/2/3 years time and compare.

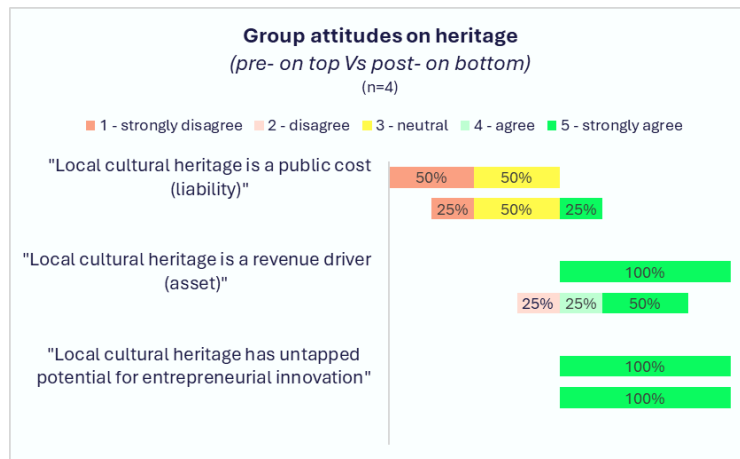


Figure 7: group attitudes on heritage

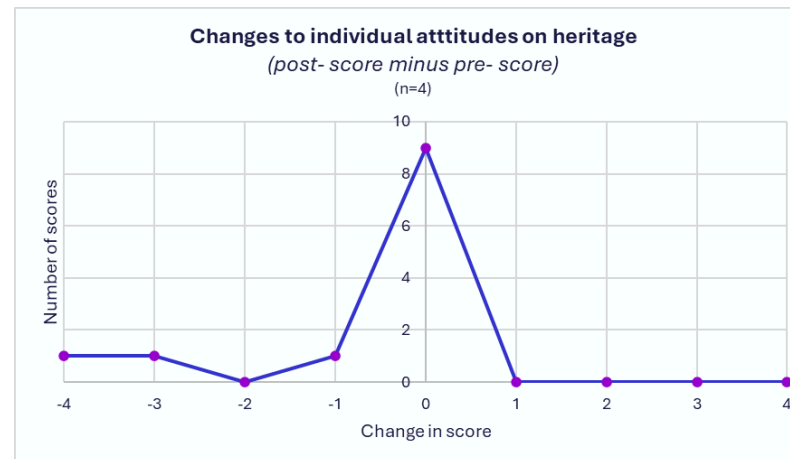


Figure 8: changes to individual attitudes on heritage
N.B. "liability" scores reversed to reflect that agreement is undesirable

"We want to encourage synergy between industry and community and create sustainable solutions for the future that will enrich the identity of our place."
Architect

Outcome: Improved business growth for the supported entrepreneurs

The supported innovators are mostly in the very early stages of their entrepreneurial journey, too early to have attracted revenues - in fact only one of them already identified as an entrepreneur before the Accelerator. As such, it is too early for them to see significant revenue channels opened or expand their staff base, and their evolution is thus focussed mainly on building the preliminary foundations for that growth: networks, experience, resources and skills.

The entrepreneurs self-assessed their abilities in key entrepreneurial skillsets that the Accelerator looked to help them hone, through the period of experimentation and dedicated mentors. Figure 9 shows the group scores, and can broadly be split into three key trends:

Strong view of skills in co-creation, environmental sustainability, heritage-based innovation and product development - all scored strongly and / or grew overall during the Accelerator, suggesting the entrepreneurs feel positive with capabilities in these skills, which are fundamental to HUB-IN's aims.

Some mixed ratings of knowledge of finance, accounting, sales and marketing, suggesting these could be valuable areas to adapt in future Accelerators, or make a focus of mentorship or other actions. Each skill saw decreases to some degree - this may be due to some stated challenging experiences with the experimentation, due to the early stage of their entrepreneurship or due to the effects of learning during the Accelerator what "good" looks like and adjusting their post-evaluation downwards - i.e. their post-assessment may simply be more accurate based on an improved understanding of these skills.

One particular challenge for entrepreneurs was in developing skills in Public Relations - most changed their self-assessment from generally high to either low or medium. At the extreme, one entrepreneur (an illustrator) dropped 2 scores (i.e. they left the Accelerator considering their skills Medium compared to a starting assessment of Very High) - as stated above, this can be due to increased awareness, but is worth investigating as an input to future mentoring.

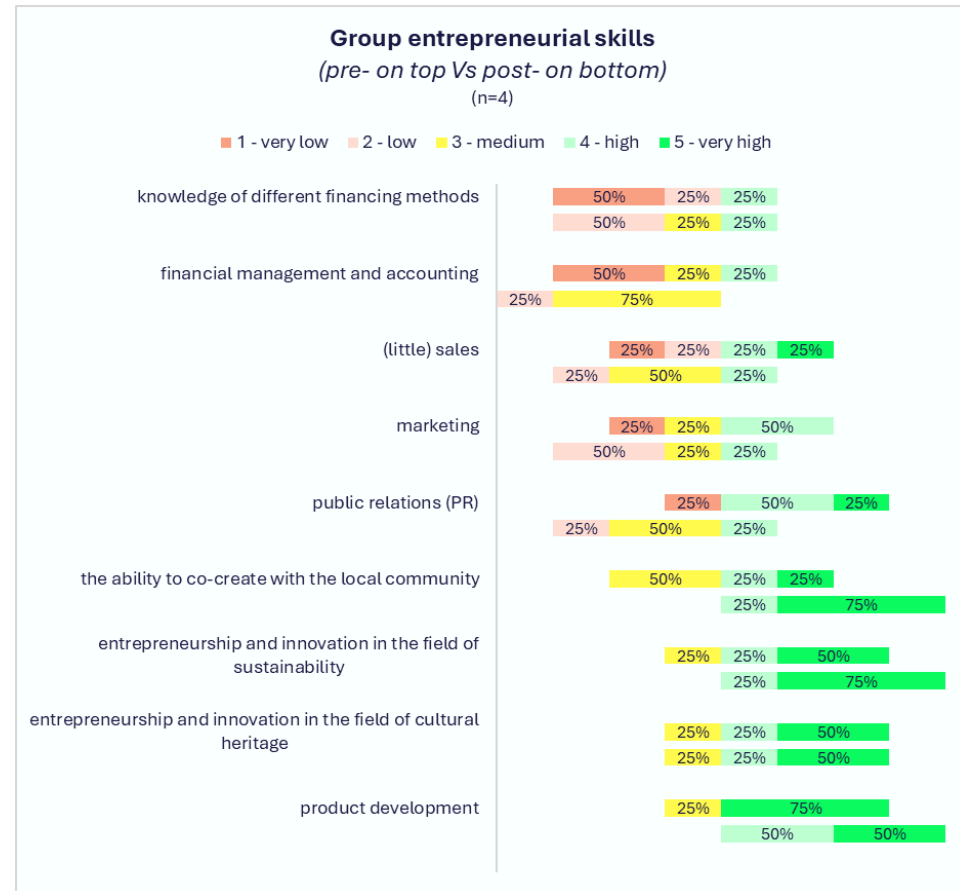
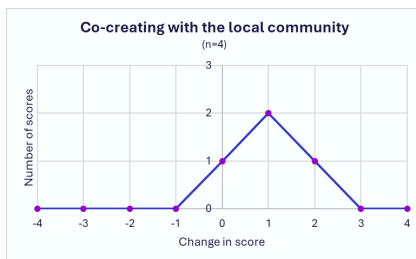


Figure 9: group entrepreneurial skills (self-reported)

The individual changes in skills fall into four typical patterns, each with its own relevance to current outcomes and future evolution of the Action. N.B. four entrepreneurs is a small sample size, but is the full set of supported entrepreneurs. Larger samples may also approximate these typologies, with similar take-aways.

Positive

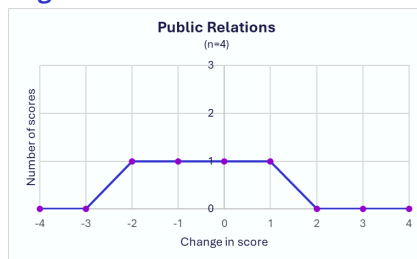


These types of results see an overall positive change in the group maturity, suggesting that the mentoring or experimentation processes were well-targeted for the entrepreneurs' abilities and potential. In the example for co-creation above, one entrepreneur increased two points (an illustrator who grew from '3 - medium' to '5 - very high'); two entrepreneurs increased one point, and one remained unchanged.

*Relevance: future iterations of the Accelerator may wish to build on the success and **replicate** (mostly unchanged?) the mentoring and experimentation elements that cater to:*

- co-creation
- sustainable entrepreneurship
- heritage-based innovation

Negative

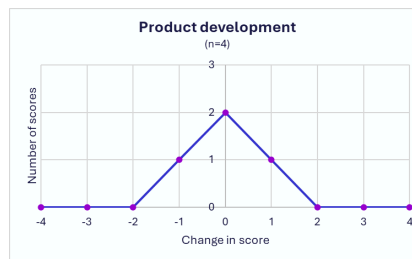


These types of results see an overall negative shift in the group's stated maturity. An overall decrease does not mean that all were affected equally: in the example above, two entrepreneurs decreased, yet another did not change at all and one even improved. If a subset still sees positive growth despite others struggling, then it may be that the mentoring model is still valid, and light adaptations or tweaks to external factors can help.

*Relevance: future iterations of the Accelerator may wish to "deep dive" with entrepreneurs to understand why, and **tweak formats** as a result on:*

- knowledge of finance methods
- financial management & accounting
- marketing
- Public Relations

Balanced

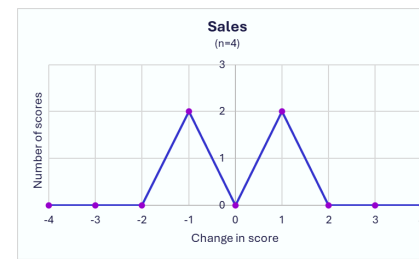


These types of results see equivalent increases or decreases. Changes net out overall, and there is a relatively high frequency of entrepreneurs who report no change at all from the support. Context is important as the lack of change could be due to various factors (was mentoring not challenging enough; or could the experimentation format be adapted; or were they already experts without growth needs; were they overconfident in pre- scores etc).

*Relevance: future iterations of the Accelerator may wish to interview entrepreneurs to understand if support was too basic or too advanced, and consider offering stronger foundations or **stretch coaching** in skills for:*

- product development
- heritage entrepreneurship

Polarised



These types of results have binary splits - individuals only either "win" (positive shift) or "lose" (negative shift) and nothing in-between. In the example above, the changes are a mirror image that balances itself out: all either decreased or increased, to the same extent. There is in-built uncertainty as the same format has a completely different result depending on the individual. N.B. some diversity in results is always to be expected.

*Relevance: future iterations may wish to probe why some succeed but others fail, whether business maturity or other conditions, and consider ways to **derisk** the volatility (e.g. buddy the less mature with the more mature? etc) and / or accept that variance is expected.*

- Sales

*"The final product varies: change came about due to **financial and time pressures**. The final prototype is an **optimised, simplified and cheaper version** of the original idea."*
Architect

Access to the mentorship was given high value, for the advice and constructive challenge received:

*"The accelerator was very business-oriented, the **mentorships helped open up the idea of entrepreneurship.**"*

Illustrator

*"Excellent. Each of the mentors contributed their valuable **ideas and concerns**, which helped me create the final product."*

Clay-worker

*"The experience with the assigned mentors in the accelerator was excellent. The mentoring program was well designed and implemented, and the mentors were experienced experts in their fields who were able to provide me with **valuable knowledge and advice.**"*

Jeweller

*"So far, we have had the opportunity to speak with one mentor, whose perspective on architectural thinking about space **opened up a series of questions for us and thus created many opportunities.** We are very much looking forward to meeting the rest of the mentors, hearing their opinions, views and reflections."*

Architect

Half of the entrepreneurs specifically called out their own need to simplify ideas within financial and time constraints, in order to become marketable products with a greater chance of commercial viability:

*"The original idea was to make Bistrice houses completely out of clay, which **turned out to be very time-consuming and difficult to implement.** Throughout the project, the idea was limited to the facades of old, historically important houses in Bistrice, with an added space for candles."*

Clay-worker

*"The final product varies; the change came about due to financial and time pressures. The final prototype is **an optimised, simplified and cheaper version** of the original idea."*

Architect

Some uncertainties for participants remain: for example the navigation of property rights, trademarks, patents etc to secure commercial value. When asked "Have you acquired any intellectual property rights that you would not have without the support of the Accelerator?" all answers were: "No, "No, it might make sense", "?" and "I don't understand". This could be an area to explore in future Accelerators - whether this is a local nuance whereby intellectual property rights are not needed for innovations; whether this is a potential blindspot that needs addressed through targeted coaching; or whether property rights are simply irrelevant to the types of products and services produced.

The growth in networks and new contacts for collaboration has yielded some commercial results

for some entrepreneurs, and potential future opportunities for others. In general, participants gained new knowledge from their connections, and gained access to new opportunities for showcasing and selling their products:.

- *partnership contract*
winning a year-long contract for collaborating on artisan training
- *retail channel*
securing retail space at a new location ("TIC")
- *resources*
one of the entrepreneurs secured office space in the Crouzet building for her association

*"Thanks to my mentor, I was invited and selected as an external collaborator for aluminium jewellery design workshops at Centrum Rog in Ljubljana. I got a **contract for one year.**"*

Jeweller

*"Cooperation with mentors, lecturers and other team members brought new acquaintances and thus also **new opportunities for cooperation.**"*

Clay-worker

*"I got some **interesting contacts**; with whom I am in contact."*

Architect

Additional “co-benefit” outcomes:
Improved attractiveness of Crouzet, its services and exhibitions

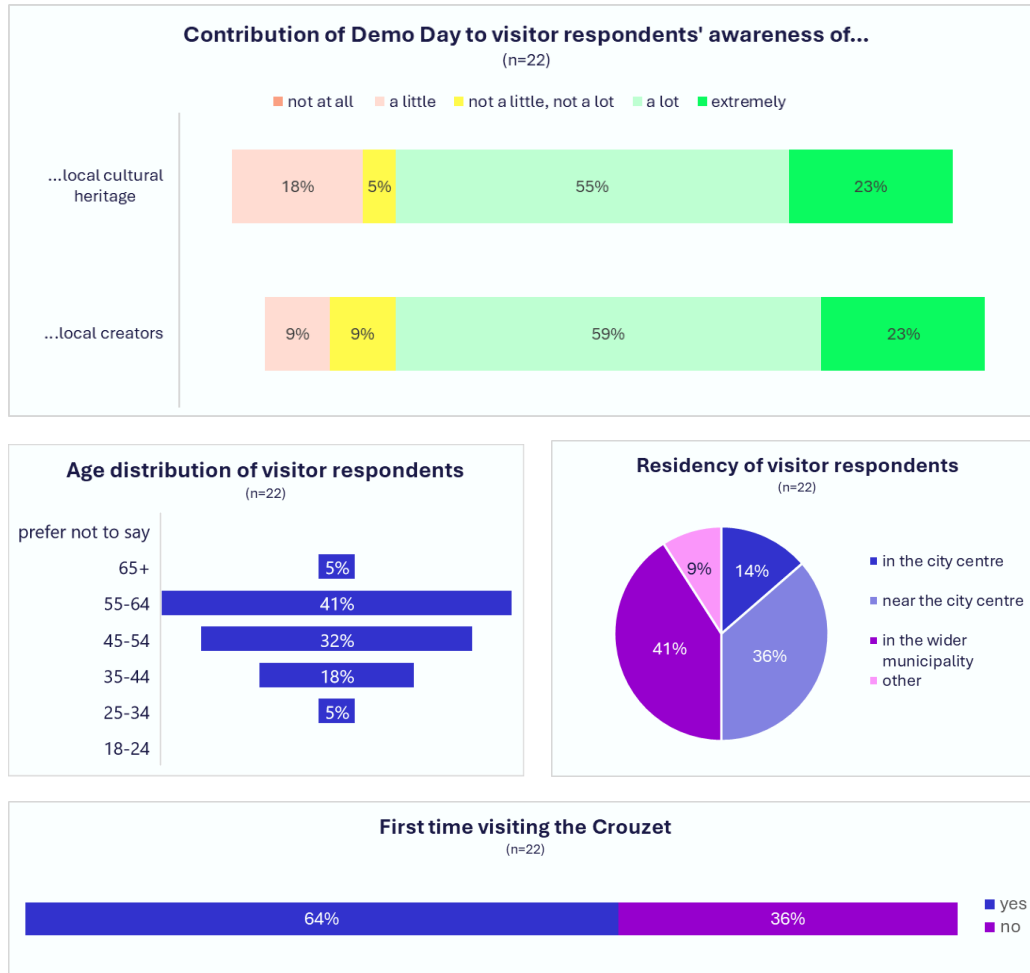


Figure 11: scores from Demo Day respondents on the effect on awareness on culture and creators; age groups, residency and discovery of Demo Day respondents

A Demo Day was held at the conclusion of the Accelerator with the entrepreneurs exhibiting their innovated products and services. The Hub team conducted a questionnaire of visitors to understand some key information on perceived benefits, of which 22 responded out of approximately 30-40 visitors.

Over 80% felt the day increased awareness of local creators in the creative and entrepreneurial sectors in Slovenska Bistrica (82% of respondents selecting either a 4 or 5 when asked to scale their increased awareness on a scale of 1 - 5, with 1 being “not at all” and 5 being “extremely”).

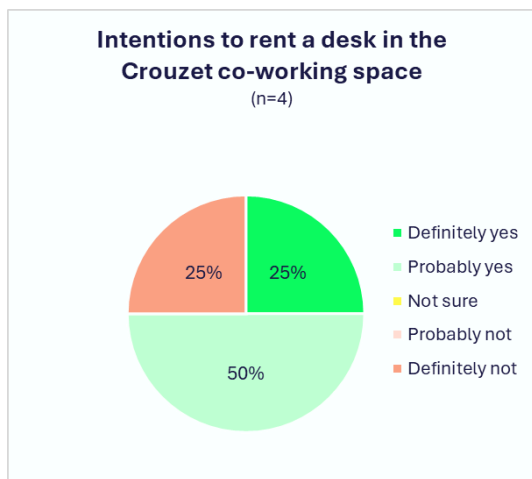
A similar majority increased awareness of the local heritage of Slovenska Bistrica (77% of respondents). In combination with the new first-time visits to the Crouzet (below), this appears to have been successful at generating local awareness.

Demographically, half of respondents were local residents (live in or near the HUA), supporting the Hub team’s ambitions that a fair proportion of awareness benefits are disseminated locally. The majority of ages were over 45, and also a majority female (77%).

A high proportion of first-time visitors to the Crouzet (64%) was reported by the respondents, with the vast majority stating their primary motivation for visiting was precisely to meet / support local creators - suggesting that future Accelerators (“Accelerator 2.0”) can likewise use Demo Days and other dissemination events to generate interest and engagement in discovering the Crouzet amongst local residents not previously experienced familiar with the building, its heritage and refreshed offerings per Action 1. By attracting visitors, this may assist with the goals of Action 1 (“Crouzet Hub, a central space for creativity, innovation and heritage”) by enabling visitors to become familiar with its potential as a co-working and / or event space.

Additional “co-benefit” outcomes:

Improved attractiveness of Crouzet, its services and exhibitions



For the support entrepreneurs, their growth in networks and other benefits (as described above) can ideally support the utilisation of the newly refurbished Crouzet building.

The entrepreneurs generally indicated positively about renting a desk in the building once ready: one 'definitely yes', one 'definitely not', and the rest 'probably yes'. The views broadly fit with the Hub team's ambition of having the Crouzet host innovators in its co-working spaces and - crucially - maintaining enough interest to avoid vacant or underused spaces. Four entrepreneurs is a small sample, but for small local neighbourhood- level spaces, this gives a useful indication of potential interest.

Figure 12: the entrepreneurs' intentions to rent a desk in the Crouzet co-working space

Testimony from one of the Acceleration programme entrepreneurs

"My service is linked to cultural heritage in several ways:

Use of traditional techniques:

*Workshops for **designing jewellery from recycled aluminium** are based on traditional metalworking techniques that have been passed down from generation to generation in Slovenia. This allows us to create unique products that at the same time **respect the rich history of craftsmanship** in our region. Use of local materials: The aluminium we use to make jewellery comes from a local factory with a tradition. This means that we support the local economy and **reduce our impact on the environment** by reducing the transport of materials.*

Location:

Our workshops take place in the premises of the old city center, which is rich in cultural heritage. This creates a unique atmosphere that is perfect for creative expression and connecting with the past.

Benefits of connecting with cultural heritage:

Increased visibility:

*Connecting with local culture and history has helped us **increase brand awareness** and **attract customers** who appreciate unique and authentic products.*

Supporting the local community:

*By using **local materials** and working with **local artisans**, we contribute to the well-being of our community.*

Disadvantages of connecting with cultural heritage:

Limited target audience:

***workshops are not attractive to everyone**, as some people are not interested in cultural heritage.*

Difficulty adopting to trends:

traditional techniques and materials may not be as flexible as modern ones, which can make it difficult to adapt to the latest fashion trends.

*Despite some challenges, I believe that the advantages of connecting my workshops with cultural heritage outweigh the disadvantages. I am proud to run workshops and create products that are unique and sustainable while respecting the rich history and **traditions of our region**.*

SPOTLIGHTS: SPECIFIC CITY ASSESSMENTS

5.1.8. Business maturity qualitative study (Utrecht)

N.B. each city conducts more evaluations than the snapshot presented here - see their D5.3 Evaluation Reports at <https://hubin-project.eu/library> for more findings and context.

ACTION 2: INITIATE AN ART PROGRAMME IN THE HUA

Key metadata

Action theme	Acceleration Programmes and Challenge Calls Placemaking
Action clusters	Cultural and Creative Industries Resilient and Human Connected Places
Expected outcomes <i>(city level)</i>	Improved business viability and skills for the creative orgs supported
Expected impacts <i>(programme level)</i>	1: reversing abandonment and neglect of historic heritage (cultural) 4: cross-sector collaboration, job opportunities and skills (economic)



Operational and process evaluation results

The open call reached and supported 23 artists and creative entrepreneurs: 15 male, 8 female. The artists were engaged in surveys and focus groups to understand perceptions.

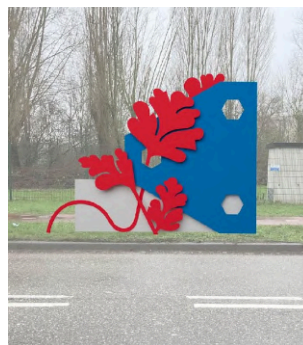
High attendance and engagement rates: attendance for meetings on the open call were high, with a high number of plans received (20+).

Participation in the open call resulted in new ties in the area: the open call process fostered community engagement and connections among participants, strengthening ties to the Werkspoorkwartier and contributing to a vibrant social fabric within the area.

Participants highlighted the value of networking and the sense of connection fostered by the open call, which strengthens their ties to the area and potentially leads to future collaborations and opportunities.

Did we reach the right targets? Did we provide the right quality of engagement?

- *Artists:* Participants are directly impacted by the open call process. In addition to being able to realise an art work and getting paid for it, they experience significant skill development, including navigating municipal structures, project management, and communication. This equips them with valuable skills for future endeavours. Participants also express intentions to remain in the Werkspoorkwartier, driven by factors such as lease agreements, external developments in the area, and the vibrant community atmosphere.
- *Local Community and Stakeholders:* The broader local community and stakeholders in the Werkspoorkwartier area are indirectly impacted by the outcomes of the open call process and the continued presence of participants. They may benefit from increased vibrancy and cultural enrichment resulting from participants' artworks and contributions to the area's cultural identity. Additionally, the commitment of participants to remain in the Werkspoorkwartier fosters a sense of community continuity and cohesion.
- *Municipality and Government Agencies:* Municipal and government agencies are indirectly affected by participants' engagement with the open call process and the integration of cultural heritage into their artworks. Participants gain insights into navigating municipal structures and understanding the multifaceted nature of local government, potentially leading to improved collaboration and communication between creative individuals and government entities. Additionally, the integration of cultural heritage into participants' projects aligns with the municipality's goals of preserving and promoting local cultural heritage.



Outcome: Improved business viability and skills for the creative orgs supported

The art programme was established with an Open Call to identify local artists and creatives. Focus groups revealed the benefits this Action has on their business maturity, skills and visibility.

Participants highlighted significant skill development during the open call process. They gained insight into navigating the complexities of municipal structures, understanding the multifaceted nature of local government, and learning to work collaboratively with different departments. Moreover, they honed practical skills such as creating concrete project plans, navigating technical aspects, and managing collaborations with diverse stakeholders. Participants also emphasised the importance of communication, both in terms of articulating project narratives to potential funders and maintaining transparency within partnerships. Overall, the experience fostered self-confidence and adaptability, equipping participants with the skills necessary for future endeavours in their respective fields. This enhanced skill set could potentially lead to economic benefits in future endeavours by increasing participants' capacity to secure funding and manage projects efficiently.

*"I have learned a lot in terms of **craftsmanship that is completely new to me**. There are also people who have a certain form of knowledge, so you have to go there. **You can't read that in a book** either. You just have to do that."*

Artist

Participants expressed intentions to continue operating in the HUA after the open call concludes.

While some cite factors such as lease agreements, others emphasise the importance of external developments in the area. Concerns arise regarding potential changes in the area's identity due to commercial ventures like hotels or entertainment venues. However, participants remain optimistic, expressing a desire to stay rooted in the creative atmosphere of the Werkspoorkwartier. They highlight the value of networking and the sense of connection fostered by the open call, which strengthens their ties to the area. Overall, participants express a commitment to remaining in the Werkspoorkwartier, driven by their engagement with the vibrant community and creative opportunities it offers.

*"As long as **no housing is built** in the area, everything will be fine, I think. Then a lot of creativity remains."*

Artist

Outlooks were mixed regarding the impact of the open call on their revenue growth. While some acknowledge the potential for increased visibility and subsequent sales once their artwork is installed, others highlight the uncertainty of its influence until the project's completion. One participant emphasised the emotional and confidence-building aspects of participation, which could lead to future opportunities. Another participant discussed their efforts to secure additional funding through other grants to support their project, highlighting the financial challenges faced. Overall, while some participants anticipate positive outcomes in terms of revenue generation, others remain cautious about making definitive assessments until the project progresses further.

*"The emotional side [is important] to make yourself **more confident to embark on such a journey again**, to undertake something quite large. It's a bit of an **upward spiral**. Winning such an Open Call also gives **you energy and desire** to do things."*

Artist

All participants affirmed their engagement with local cultural heritage in developing their artworks. They emphasised the integration of cultural heritage into their conceptual frameworks, reflecting an alignment with and contribution to the cultural identity of the Werkspoorkwartier. However, there's a debate on the breadth of the term "cultural heritage", with one participant suggesting a broader interpretation beyond just the historical context of the Werkspoorkwartier. They caution against over-emphasizing history at the expense of contemporary developments. The interviewer highlighted the premise of HUB-IN, which encourages the coupling of creative entrepreneurship with cultural heritage to strengthen both aspects. Participants acknowledged the importance of striking a balance between honouring the past and embracing innovation. Overall, they agree that their projects effectively reflect and engage with the cultural heritage of the area.

Lessons learned regarding experiences with the Open Call include highlights on what went well and what can be improved: :

- While some goals have not yet been achieved, there's a sense of progress.
- They discussed the challenge of aligning their artistic vision with the constraints imposed by the municipality, recognizing the need for better expectation management.
- Participants expressed both satisfaction and surprise with the artistic development process, citing the need to navigate bureaucratic hurdles and the importance of learning new skills.
- Despite facing setbacks such as unexpected health issues, they remain optimistic about the project's outcome.
- Overall, the group emphasised the value of hands-on experience and collaboration in overcoming challenges and achieving artistic goals.

*"The aim was to slow down traffic in the area as decisively as possible. I think that **effect will diminish** due to the weakening [of our plans during the approvals process] that has now necessarily occurred."*

Artist

The Hub's support is seen as fundamental to change, with high levels of "attribution". The respondents reflected on the hypothetical scenario of not receiving support through the open call, suggesting that their projects might not have materialised or would have faced significant challenges without external funding. They acknowledged the pivotal role of the Open Call in catalysing their creative endeavours, emphasising its value in providing both financial support and a sense of legitimacy and responsibility. While attributing their current progress to the external funding received, they also highlighted the intangible benefits, such as energising their artistic practices and fostering connections within the community. Overall, they recognized the multifaceted impact of the open call, not only in advancing individual projects but also in contributing to the vibrancy and development of the local area.

*"I was informed that there was an Open Call, and we said: that's a great idea. **If we had not been chosen, I think I would have died a silent death.** That sounds very sad."*

Artist

The Open Call has resulted in some unexpected positive results in the perception of the artist:

- *Enhanced skill development*: while participants expected to gain some skills through the open call process, the extent of skill development with regard to navigating bureaucratic hurdles might be unexpected.

Likewise, there were also be some unexpected negative effects:

- *Revenue growth uncertainty*: while some participants anticipate increased revenue through visibility and sales opportunities, others express uncertainty about revenue growth until their projects are completed. In addition, in the original budget a lot of additional costs were not included, which lowers the fee that is left for the artists themselves.
- *Bureaucratic hurdles*: participants discuss challenges in aligning their artistic vision with municipal constraints, highlighting the bureaucratic hurdles they faced. These unexpected challenges did delay project progress or lead to frustration among participants.

*"**How do you realise what is in your head?** That it is not the end product. **There are steps I never thought about before.** It's a good thing to do, because **I have to learn to work this way.**"*

Artist

Artist focus groups offered rich insights for continual improvement of Open Calls and policy:

Technical skills can present unexpected challenges - artisan networks can innovators to overcome these

"I also **gain experience in how it works** to have such a thing made from steel and aluminium, and what technical things are involved. That's a bit **more complicated than I thought.**"

"I have learned a lot in terms of **craftsmanship** that is completely **new to me**. There are also people who have a certain form of knowledge, so you have to go there. **You can't read that in a book** either. You just have to do that."

Business skills are as important for innovator growth as technical skills, yet may need specific support

"**Making a plan concrete...** you have an idea, but to be able to demonstrate how it is safe, what it will look like, how you will work, who will use you, draw up a budget...that is also an experience. **I've done that before, but not on this scale.**"

"**How do you realise what is in your head?** That it is not the end product. **There are steps I never thought about before.** It's a good thing to do, because **I have to learn to work this way.**"

Formal institutions can remove the bottlenecks to quality applications by cutting bureaucratic hurdles

"We have never done anything with the municipality before. Doing all **the paperwork is new to me, and I'm really scared of it.** It's a learning process."

"The aim was to slow down traffic in the area as decisively as possible. I think that **effect will diminish** due to the weakening [of our plans during approvals] that has now necessarily occurred."

Networks and collaborating with them may have a steep learning curve for start-ups and new innovators

"I also learned a lot about collaborations. How I normally organise my practice is that I can do everything myself, and that was really not the case with this. **I had to start collaborating, and that is quite new for me.**"

"I also wrote to funds with a kind of better version of the story I'm doing now, to make it even slicker. So you better **understand what a lender is asking for**, what they consider important. A **better relationship** between applicant and lender."

Entrepreneurial culture can be as much about emotional as physical experience

"Every time you do something new and can really make it happen, it is much easier to move on to something else. After working in steel once, I was able to **immediately start thinking differently.** It's always thinking ahead."

"The emotional side [is important], to make yourself **more confident to embark on such a journey again**, to undertake something quite large. It's a bit of an **upward spiral.** Winning such an Open Call also gives you energy and desire to do things."

Urban culture concerns may require aligning with other policies on Hub longevity

"As long as **no housing is built** in the area, everything will be fine, I think. Then a lot of creativity remains."

Attribution depends on the types of projects and access to finance

"I was informed that there was an Open Call, and we said: that's a great idea. **If we had not been chosen, I think I would have died a silent death.** That sounds very sad."

"I don't think I would have done this right away. It would be a matter of waiting for financing that makes that possible. Those aren't things I can do on my own, so **I might have realised that plan at some point.**"

Next steps

Participants highlighted the value of networking and the sense of connection fostered by the open call, which strengthens their ties to the area and potentially leads to future collaborations and opportunities.

5.2. RECOMMENDATIONS LOG

Below is a log of all recommendations from Section 4 “Progress Towards the Programme’s Theory of Change”, as sourced from city reports and consortium discussions. The intended outcome and its coloured indicator for maturity of results are retained, so that the recommendations are kept within their context.

Increased recovery of cultural heritage values ●

Recommendation (low-cost nudges can uncover the desire of hidden knowledge-holders to share): feedback on why Heritage Walk co-designers were demotivated to participate including making contacts, knowing more history, and pride in displaying hidden history. However, they feared the benefits of one-off Action would soon disperse. Keeping the Walks “alive” was seen as crucial. Given municipal budget constraints, the guides recommended considering the role of light-touch nudges that unlock dormant energy and inspiration: announce competitions or host debates to solve problems; differentiate from mostly-commercial offerings and shopping malls to attract visitors all year (e.g. concerts, treasure hunts); or partner with future infrastructure development projects to provide a cultural counterpart to their physical regenerations.

Increased sense of unique identity for the HUA ●

Recommendation (align to existing sense of identity to encourage community ownership): Braşov reports that people in HUA are intrigued by the pretext objects installed in the squares and the lives of the objects. Each square has its caretakers, who act as guardians for these objects. Recently, an anonymous individual repaired the Snake Bank furniture, showcasing the community's dedication to preserving these objects. Another touching example is the collective effort on social media to locate the Wheelbarrow Bench after it was relocated. These objects bring people together, as they are not only utilised but also serve as pretexts for shared stories and captured memories.

Increased attractiveness of the HUA as a location for prototyping or business operations ●

Recommendation (offer low-rent co-working spaces to crystallise Accelerator success): A common finding was that, in general, innovators do not see the need to locate their business to the HUA in order to prototype there. There was success in the refurbished Crouzator that has already secured one occupant, and another two potentially as they responded “probably yes” when asked if they would locate (four spaces available). As well as networks and other resources, part of Crouzator's offering is commitment to affordable rates for occupants. Municipal-owned buildings may be able to repurpose un- or under-used spaces as co-working spaces and offer incentives such as low rent (or other) to attract occupants, and thereby encouraging an Accelerator's networks and knowledge gains to embed more deeply in the HUA.

Increased rehabilitation of underused land ●

Recommendation (balance “soft power” with regulations to prevent backsliding): in the case of illegal space occupation, large gains were made from voluntary uptake of the guidance by the local commercial sectors, built by goodwill and aligning interests during the Hub's co-creation processes. However, commercial pressures may ultimately prevail - formal enshrinement (and enforcement) of guidance in Regulations or Mayoral Decisions may be required to prevent progress being quickly undone once the high energy mobilisation phases finish. This may also require “striking while the iron is hot” to capitalise on political will: elections and departmental shuffles create an uncertainty and instability that may place an ongoing pause (or veto) on formalisation.

Reduction in gentrification processes



Recommendation (drive social inclusion policies to slow, rather than reverse, gentrification):

gentrification is worth cities monitoring over time, to consider how gentrification and displacement can be mitigated to some extent through social inclusion and policy-driven tools. 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".³⁴

Increased inclusiveness of key stakeholder groups



Recommendation (nuance is needed in cases where stakeholder fatigue is an important blocker): for example, the ability to track and incentivise inclusion can be hampered if the HUA has recently seen excessive engagement from other HUA projects - their data collection may have posed a barrier to HUB-IN collecting data afresh on demographics, attitudes, feelings, behaviours etc, and stakeholders may be wary if the stated plans of those previous external projects have not materialised. Nevertheless, Hubs can collect some light data on inclusivity in order to track some basics, either quantitatively or qualitatively as fits the situation.

Recommendation ("word of mouth" can create a snowball effect that reaches hard-to-reach groups): though it may require patience and sustained focus. For Grand Angoulême's first Caravane, invitations were sent to an initial list of personalities known or met by members of the project team, notably during the feasibility study in 2022. Despite needing to connect with the local CCI sector, the early sessions were dominated by public sector attendance. However, over 13 sessions there was a "snowball effect" whereby artist contacts generated more artist contacts... whereas the first session included artists as one in ten of the total invitees, by the 13th session that representation had grown to about 2 out of every 3 (64%). Attendance saw a 12-fold increase from 11 artists to 145, showing how scale can build over time and the power of gaining access and trust to word-of-mouth networks rather than relying on more standard email or online marketing.

Recommendation (leverage local resident knowledge when needing to identify private landowners): Genoa's Action 1 "Urban Outfitting", faced significant challenges in identifying private owners and receiving their written authorisation to paint their shutters, but this was overcome with the crucial help of local residents.

Increased pride and sense of belonging of local citizens



Recommendation (include contingency budget in case of vandalism by disaffected citizens): Braşov's Action 2 "City as a Classroom" saw some vandalism to the street furniture that it deployed in the public squares, and faced some high costs associated with repairing damaged objects.

Increased inclusion of environmental sustainability principles into HUA redevelopment



Recommendation (use co-design to leverage the increasing topicality of environmental sustainability): environmental sustainability is increasingly topical amongst communities and likely will be increasingly so. Co-creating ensures these voices are heard - but whilst communities supply the "why", this may need balanced with experts who can supply the practical "how". Municipalities and business might need to work together on "who pays": actions have shown that businesses are also open to environmental sustainability and even committing to starting Working Groups for their area, but the reality of commercial pressures means this is greatly assisted if benefits can be shown in order to make it an addition (not a sacrifice) for their bottom line. This may include the ways in which various green accreditations can benefit investment, visitation, and marketing opportunities etc, or other aspects of the green market.

³⁴ 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-theresuch-thing-as-gentlyfication/>.

Increased awareness of opportunities to foster job creation and social innovation enterprise within HUAs



Recommendation (clearly communicate the value-add in order to engage and assure quality):

Slovenska Bistrica notes that it would also be good that social innovation initiatives have clear value-added messages ("what is in it for me / for my community") and also clear communication on the value of such activities to various municipal departments that can otherwise represent a barrier if excluded from planning and on-going conversations about such initiatives (especially the public spaces work team). Judging from the number of proposals that didn't make it through the selection criteria for the first Accelerator and Crouzet Hub events programme call, it is important to invest time and effort into familiarising the stakeholders and the public of the novel initiatives and their particularities through more intensive processes of awareness raising, capacity building and inspiration.

Increased interest and understanding of how to achieve Hubs of Innovation and Entrepreneurship



Recommendation (embrace barriers as a "call-to-innovation"): *in Genoa, response times from the Authority for Cultural Heritage can be up to 120 days from submission of the request. Hence, sometimes designing a Plan B can be useful. It is the case for one of the projects from Action 4 "Experimental Call", where the permissions to install projectors on heritage buildings was denied, and implementers had to find an alternative solution - eventually the implementers overcame this rejection by creating a network with some of the local shops, which ended up hosting the projectors inside their premises, showing the planned images in their shop windows for passers-by to see. In this way, they actually increased the involvement of inhabitants and local businesses in the project, who felt a sense of belonging with it and a strong cultural identity.*

Recommendation (engage municipal departments early): *Hubs noted that, considering some resistance they encountered with doing Open Call interventions in the public space, they would recommend engaging other departments within the municipality (traffic, permits etc), much earlier in the process to derisk delays to timelines.*

Recommendation (establish strong synergies with other on-going initiatives in the area): *regeneration programmes, management plans, etc. - it is crucial to ensure the successful delivery of the Hubs and maximise the impact of its actions.*

Recommendation (have an "aftercare plan" for public innovations and beware of political unknowns): *despite their best efforts, Braşov encountered challenges in donating the Action 2 "City as a Classroom" pretest objects to the Municipality. The administrative challenges add up with the upcoming change in leadership following the current mayor's loss in the election. As a result, they are actively seeking out alternative solutions to guarantee the proper care and management of the objects.*

Improved connections between entrepreneurs and innovators (densification of ecosystem networks)



Recommendation (factor in networking early, by requiring partnerships at Applications stage): *if Accelerators, Challenge Funds, Open Calls and other co-creation activities involve innovators applying for funding, the Hub has the option of making partnerships a requirement - the application can feature specific questions on who they are partnering with for the activity, and why. Further directions can be set - for example whether partnerships should be between small and large organisations (skills transfer), between commercial organisations and academic bodies (commercialising research), between organisations and communities (social value), between organisations and public bodies (matched funding), or any other combination. Some programmes even feature international partnerships where two countries (or cities) "twin" on an innovation programme.*

Recommendation (play an active role in brokering networking gaps): *(continuing the above recommendation) part of the Accelerator's value can also be through brokering matches where there are gaps or challenges for the applicants - for example hosting early-stage pre-Application networking events, or leveraging partnership the municipality has with local universities etc.*

Improved innovation processes within entrepreneurs and innovators



Recommendation (minimise admin in any processes, to free entrepreneurs' time for innovation): as one Hub put it "bureaucracy kills innovation", and this was a common experience as actions needed co-created and approved at various different levels and stages. Some entrepreneurs reported feeling daunted by the requirements placed on them, saying "the paperwork is new to me, and I'm really scared of it. It's a learning process.". Given the short time and budget constraints also raised in a few places, relieving the time and focus from entrepreneurs may free up some of those resources for the innovation and entrepreneurship activities. How this is done depends on each Hub, whether through coaching modules or mentorship or a buddy system to navigate admin requirements etc.

Recommendation (ensure rules for the safety and security of younger participants): Braşov recognised the necessity of presenting rules for the safety and security of the pupils and students acting in the "City as a Classroom" working group, as their exploratory sessions take place on the streets of the HUA, as well as the practice they will perform when building wooden urban furniture. As well, working with minor pupils raises the risks and more care and attention are needed from the mentors. Similarly, Belfast recognised the need for parents' permission to issue surveys to event participants aged under 18 (user testing, dissemination events etc).

Recommendation (Actions are dynamic and must be able to adapt): Hubs raised that the Action Plan must be a dynamic document with the flexibility to adapt. Although the objectives and expected impact are defined during the design phase of the action plan, it is essential to be able to adapt the initially planned methodologies to the difficulties encountered during the implementation phase.

Improved qualifications and skills of local stakeholders and citizens



Recommendation (include modules or mentoring on financing and budgeting): each Accelerator had nuances in their focus and results, but in general the entrepreneurs and students in Accelerator-type actions seemed to progress least in finance-related skillsets. This may be due to lack of experience as they were often fresh innovators, but is a core part of entrepreneurs becoming successful (and also using public funding efficiently), so is worth investigating in the design phase as to what kind of support or coaching is optimal.

Recommendation (target entrepreneurs who are willing to calibrate, as well as grow, their skills): in several Accelerators there were outlier cases of individuals assessing their skills as actually lower after receiving support than before - this is counterintuitive, as it suggests that either the support was such low quality that they regressed in capability, or that they have soberly changed how they assess themselves once they confronted their limitations. The former is unlikely if the majority of other participants grow positively in the measured skill, and this can be determined through post-support interviews etc. The latter may be likely if the individual was overly optimistic about scoring their capabilities in the pre-surveys - once they score themselves at the top, the only way is down. This latter reason was the case on several Accelerators, and raises a question: could it be that some suitable applicants don't apply to Accelerators because they (erroneously) think they have all necessary skills already? The opportunity to actually calibrate self-knowledge - and thus identify gaps - may be as valuable as the more obvious opportunity to grow skills. This "test your blindspots" aspect could be part of any Accelerator marketing / invitations to apply, as well as the more obvious calls to "grow your skills".

Sustainable new jobs created or supported



Recommendation (monitor entrepreneurs annually, not just during programme timelines): start-ups are fraught with risk and uncertainty, and so forecasting economic benefits from a few months of support is inherently subject to large uncertainties. Any findings can only be indicative at best. It is therefore valuable to repeat the post-support surveys at annual intervals, in order to track changes over time. This could be followed up with interviews in cases that need deeper exploration.

5.4. INNOVATION SCOREBOARD

The European Commission's Regional Innovation Scoreboard³⁶ provides a comparative analysis of innovation performance in EU regions across approximately 30 headline indicators (approximately 70 including sub-indicators). Tracked annually, these are intended to assist assessment of how favourable local conditions are to innovation, offering an index relevant to national level, an index relative to EU level and an overall categorisation as an emerging/moderate/strong/leading innovator, amongst other metrics. Being at regional level, they are too large a geographical scale to detect changes from neighbourhood-level HUB-IN Actions in the short-term. Thus, they are considered here only as some wider context for how the ecosystems, Actions, and Hub ambitions align with the scoreboard indicators and support the factors that drive them. Cities can assess their innovation scores in light of where their HUB-IN Actions may assist their development, for example using the Actions' evidence when building business cases for investment, funding, replication or scaling. HUB-IN's peer learning formats may also assist with Leaders sharing knowledge.

An indicative subset of ten relevant indicators is presented below, categorised by the relevant entrepreneurial ecosystem elements that together form the "ingredients of a HUB-IN place".³⁷ Each indicator can be seen to have a strong alignment with key intended outcomes and impacts in the HUB programme and city level logic models, for which the city findings, evidence and recommendations are detailed in Section 4 "Progress Towards the Programme's Theory of Change".

Pilot city	Belfast	Braşov	Genova	Grand Angoulême	Lisboa	Nicosia	Slovenska Bistrica	Utrecht
NUTS statistical region	<i>Northern Ireland</i>	<i>Centru</i>	<i>Liguria</i>	<i>Nouvelle-Aquitaine</i>	<i>Lisboa</i>	<i>Cyprus</i>	<i>Vzhodna Slovenija</i>	<i>Utrecht</i>
	Moderate Innovator	Emerging Innovator	Moderate Innovator	Moderate Innovator	Moderate Innovator	Strong Innovator	Moderate Innovator	Innovation Leader
<i>Regional Innovation Scoreboard indicator (relative to EU)</i>								
Knowledge								
1 Population involved in lifelong learning	101	5	110	112	147	97	167	269
Formal institutions								
2 R&D expenditures public sector	65	8	90	74	102	35	30	99
Entrepreneurial culture								
3 R&D expenditures business sector	86	45	75	74	85	28	99	101
4 Non-R&D innovation expenditures	121	23	84	80	72	91	40	63
5 Innovation expenditures per person employed	122	10	125	144	81	36	64	97
6 SMEs introducing product innovations	71	15	107	88	112	193	122	102
7 SMEs introducing business process innovations	53	0	108	96	124	241	88	102
8 Innovative SMEs collaborating with others	114	14	111	125	69	309	103	146
9 Employment in innovative enterprises	118	0	89	95	118	161	109	110
10 Sales of innovative products	32	16	133	63	168	115	112	70

Table 3: a subset of ten relevant Regional Innovation Scoreboard indices for performance relative to the EU, most recent data (2023)

³⁶ https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/regional-innovation-scoreboard_en

³⁷ <https://hubin-project.eu/library/hub-in-framework-overview/>

5.5. SOURCES OF OPERATIONAL KPIS

Section 4.5 “Operational KPIS” above references the city results for the operational KPIS contained in the Grant Agreement, and sources are shown below. As noted in Section 2.5 on Limitations, cities need to prioritise limited budgets and resources to monitoring that is practical and relevant for priority indicators and therefore some of the operational indicators refer to parts of the Actions. For example, for the indicator on representation of elderly (taken as over 65s), not every visitor to every event can feasibly be monitored (perhaps due to lack of ticketing, barriers to installing sensors or privacy and trust concerns) and other complexities of HUAs may also prevent statistically significant studies and extrapolations being conducted etc. In this example, representation of over 65s is taken from the source noted. Different events will have different representations of gender and age etc - see more comments on inclusivity in Section 4.2 “Expected Impact 2 (Social: Socially Viable Regeneration)”.

EXPECTED IMPACT 1								
<i>Reversing trends of abandonment and neglect of historic heritage in urban areas and landscapes</i>								
	Belfast	Braşov	Genova	Grand Angoulême	Lisboa	Nicosia	Slovenska Bistrica	Utrecht
Number of Local Associations and Local Community Groups committed with HUB-IN at the local level from each HUB-IN pilot	Hub team report	Hub team report	Hub team report	Hub team report (communes + organisations)	Hub team communications	Hub team report	Hub team report	Hub monitoring book
Number of initiatives designed and developed in the eight HUB-IN pilots that contribute to co-creation, community development and placemaking	Actions launched to-date	Actions launched to-date	Actions launched to-date	Actions launched to-date	Actions launched to-date	Actions launched to-date	Actions launched to-date	Actions launched to-date
Number of local stakeholders participating in the co-creation workshops to co-design the tailored roadmaps	Hub monitoring book workshop attendance records	Hub team report	Hub team report / communications	Hub team report	Hub team report	Hub team report	Hub team communications	Hub monitoring book
EXPECTED IMPACT 2								
<i>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</i>								
	Belfast	Braşov	Genova	Grand Angoulême	Lisboa	Nicosia	Slovenska Bistrica	Utrecht
Number of local stakeholders participating in the development of HUB-IN pilot Action Plans	Hub team report	Hub team report	Hub team report	Hub team report	Hub team report	Hub team report	Hub team report	Hub team report
% of women engaged in the initiatives for the regeneration of places and people	Respondents involved in the Action 3 Challenge Fund projects via user testing groups etc (n=622)	Hub team report for A2 n=(152)	Respondents of Action Visitor Questionnaire (n=158)	Respondents of Open Call questionnaire (n=19)	Respondents of De-incubator (n=21)	Respondents of Heritage Walks (n=99)	Respondents of Crouzator Demo Day (n=22)	Respondents of talent development programme (n=401)
% of elderly residents engaged in the initiatives for the regeneration of places and people	Respondents involved in the Action 3 Challenge Fund projects via user testing groups etc (n=622)	Respondents involved in public lighting consultations (n=91)	Respondents of Action Visitor Questionnaire (n=158)	Respondents of Caravan questionnaire (n=34)	Respondents of De-incubator (n=21)	Respondents of Heritage Walks (n=99)	Respondents of Crouzator Demo Day (n=22)	Local Actions were focussed at active CCI, where by definition retired people will not be part of the target
Number of external local projects or programmes linked to the eight HUB-IN pilots for possible cross fertilisation	Hub team report	Hub team report	Hub team report	Hub team report	Hub team report	Hub team report	Hub team report	Hub team report

EXPECTED IMPACT 3								
<i>Boosting heritage and culture-relevant innovation, creativity, entrepreneurship and light 'reindustrialisation' of HUAs and cultural landscapes</i>								
	Belfast	Braşov	Genova	Grand Angoulême	Lisboa	Nicosia	Slovenska Bistrica	Utrecht
Number of ideas or solutions explored during the Accelerator programs in the eight HUB-IN pilots	Hub team report	Hub team report (pre-text produced and tested)	Hub team report (Experimental Call ideations)	Hub team report	Hub team report (innovation funnel)	Hub team communications	Hub team report	Hub team report
Number of SMEs supported to offer solutions or services related with the three strategic clusters of activities	Hub team report	Hub report (students still in learning - they are not start-ups)	Hub team report (subjects implementing solutions - they are not start-ups)	Hub team report	Hub team report (Convidarte etc)	Hub team communications	Hub team report	Hub team report
EXPECTED IMPACT 4								
<i>Cross-sector collaboration, creation of job opportunities and skills in cultural and creative sectors and innovative manufacturing linked to historic heritage</i>								
	Belfast	Braşov	Genova	Grand Angoulême	Lisboa	Nicosia	Slovenska Bistrica	Utrecht
Number of products or services developed during the Accelerator programs for the eight HUB-IN pilots	Hub team report	Hub team report (pre-text objects created)	Hub team report	Hub team report	Hub team report	Hub team communications	Hub team report	Hub team report
Transversal KPIs for HUB-IN Impacts								
	Belfast	Braşov	Genova	Grand Angoulême	Lisboa	Nicosia	Slovenska Bistrica	Utrecht
Expected financial leverage to ensure the HUB-IN pilots' activities beyond the project lifespan (euros)	Hub team report: matched funding, innovator results, awards towards complementary projects. Euro values are approximations based on exchange rates at time of reporting	Hub team report (students still in learning - they are not start-ups)	Hub team report	Hub team report	Hub team report (budgets in process)	Hub team report	Hub team report	Hub team report (committed funding)

Table 2: sources of city results for operational monitoring indicators



Funded by the Horizon 2020 Framework
Programme of the European Union