



# Future in Place: Participatory Future Scenario Planning for Local Policymaking

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**Abstract**: An increasing body of evidence suggests that the global emergence of Public Sector Innovation Labs over the last twenty years marked a significant milestone in facilitating design-driven innovation in policymaking. However, the challenges associated with confining design expertise to the periphery of the labs, and their focus on national government, leaves regional and local policymaking in the trenches of legacy systems, processes, and skills. This limitation is problematic as it hinders the adaptation of local policies to effectively respond to the unique challenges they face. This paper explores how design can be integrated into local policymaking to support placemaking and innovation. We address this by analysing a case study where the participatory future scenario planning method is deployed to inform local policy on sustainable and active transport in the context of the Eden Morecambe project in the North-West of England.

**Keywords**: Local policymaking; Participatory design; Future Scenario Planning; Design for Policy

## 1. Introduction: design-led innovation in local policymaking

In the latest edition of the Stanford Social Innovation Review, Anderson (2023) powerfully summarises the dilemma of modern public governance:

"The greater the global challenge, the more likely it is to fall to local governments to fix. But this modern reality comes with an inconvenient truth: Our public institutions are not equipped with the updated skills they need to effectively tackle the world's ever escalating challenges – not by a long shot." (Anderson, 2023, para. 1)

This observation underscores another reality: most of the challenges hardly adhere to administrative, departmental, or geographic boundaries, and solving them can take decades.



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At the national policy level, an increasing body of evidence highlights the value achieved through the implementation of Public Sector Innovation Labs (PSI Labs), e.g., the Policy Lab UK. It launched in 2014 as part of the Civil Service Reform plan to support Open Policy Making (OPM), emphasising the need for evidence-based, participatory, and iterative approaches to enhance transparency and accountability in policymaking. These labs not only enhance policy outcomes but also foster acceptance, legitimacy, and the use of designdriven innovation in policymaking (see Carstensen & Bason, 2012; Bailey & Lloyd, 2016; Wellstead, Gofen & Carter, 2021). However, the challenges associated with confining design expertise to the periphery of labs (McGann, Blomkamp & Lewis, 2018), and the fact that PSI Labs are primarily established to serve national government (Whicher, 2021), leaves the regional and local policymaking in the UK in the trenches of legacy systems and skills, human and financial resource constrains that are at odds with the demands placed on them (Salinas, 2022). As Bason (2022) asserts, "the era where innovation labs and teams were the main answer to more human-centred government is largely over" (p.33). The escalating social, economic, and environmental issues societies face now require radical and innovative approaches to incorporate design in policymaking, with a focus on placemaking principles and strategies that prioritise regional and local constituents at a more fundamental level. This evidence, alongside the observation of deprived and overstretched local councils in the Northwest of England, raises the following research questions:

- How can we use the future scenario planning method to enhance public participation in local policymaking?
- How can local public policymakers adopt the method and apply placemaking principles in policy design?

This paper aims to examine the advantages and challenges of combining the participatory design and future scenario planning method to support local policymakers in city and county-level constituencies. It discusses the challenges inherent in the organisational culture of government institutions (Prud'homme van Reine, 2017), which are often grounded in a public sector management framework that prioritises analytical and rational decision-making approaches. They typically operate with a systematic and quantifiable approach, guided by predetermined key performance indicators (KPIs), compartmentalised departmental structures, hierarchical leadership, and short-term orientation due to the ever-evolving political landscape (Radnor et al., 2016).

Design for policy uses cross-disciplinary evidence-based and participatory design methodologies to bring together individuals, ideas, and efforts aimed at addressing various challenges. It can be considered a collaborative problem-solving approach that aims to create a sense of community and work towards a common goal. The application of design in policy and governance aims to enhance society and contribute to a better world. Participatory design (PD) in policymaking advocates for genuine collaboration with stakeholders, emphasising democratic principles and transparency between local public agents and citizens. This inclusive approach allows for a greater relevance in policy development and facilitates the co-production of knowledge, based on empathy and human-centeredness. PD prioritizes understanding the perspectives, experiences, and aspirations of diverse stakeholders. This enables policymakers to develop solutions that are not only efficient and effective but also meaningful and impactful for the community they serve. However, the design for policy also presents several challenges, such as the exclusion of vulnerable people or the resistance from traditional policymaking approaches. Recognising these challenges of design for policy (Prud'homme van Reine, 2017; Bailey and Lloyd, 2016), we embrace future scenario planning as a generative method. This approach draws upon the pioneering work of Wack, Schwartz, Ogilvy, and their colleagues (Chermack, 2022), ensuring a balance between analytical, data-driven approaches and creative and intuitive methodologies in policy development.

This paper draws on a pilot study called "I-Connect", where we investigate the potential-use of participatory future scenario planning methods to inform local policy on sustainable transport in the context of the Eden Morecambe project in Lancashire, North-West England. The key contribution is our adaptation of the data-driven future scenario planning method that originates in organisational strategy to stimulate placemaking through design as an enabler of collective creativity.

In this paper we examine the theoretical perspectives related to design in policymaking, focusing on placemaking approaches and future scenario planning. We then introduce our methodological approach, followed by analysis and discussion of our findings. We conclude the paper by presenting our conceptual and empirical contribution to design in local policymaking.

# 2. Theoretical concepts

## 2.1 Design for policy

Design for policy (or policy design) is an emerging field of design research that gained recognition within policy studies over the past decades (Howlett, 2014; Peters, 2018). It aims to facilitate new ways of dealing with the complexity of policymaking, and the complexity of problems facing policymakers (Heskett, 2005). Yet the deliberate use of designerly approaches, methods, and tools in policy practice is a recent development (Bason & Skibsted, 2022). This has led to an expanding field of design research focusing on public policy with recognised national and international examples (see Kimbell et al., 2022).

Research on design for policy has focused on processes, instruments, spaces, institutional constraints, and the politics involved. There is growing interest in the relationship between the theoretical and practice sphere of design and political science, democratic theory, and co-production with different stakeholders and laypeople (considered experts by experience). Indeed, the role of design here lays in its capacity to set up spaces for rethinking established values and paradigms in various areas such as climate change and wellbeing, and it can lead to transformative change (i.e. Hillgren et al., 2020). Design facilitates collaborative engage-

ment with complex situations, surfacing human-centred perspectives, combining diverse expertise, and engaging with various stakeholders. However, research on design in relation to public policy remains still in its early stages and fragmented.

Our paper aligns with Kimbell et al. who characterise "policymaking as a more reflective, uncertain and even ambiguous process" (2022, p.4) and who has more recently proposed the concept of "anticipatory design" for regenerating policymaking (Kimbell, Durose, Maze & Richardson, 2023, p. 38). This informs our approach of using futuring methods to support local policymakers in responding to increasingly complex and uncertain socio-economic challenges that transcend conventional problem-solving methods.

## 2.2 Placemaking in policy design

McCann (2019) reflects on interregional inequalities in the UK and highlights the detrimental impact of "highly-centralised and top-down governance systems" (p.7) – a sentiment supported by feedback from local authorities gathered throughout the project. This feedback further confirms the observation that local policymakers lack awareness of the role and impact of PSI Labs. Gillinson et al. (2010) propose that governments should delegate power to local communities that possess the necessary responsiveness and empathy to foster social innovation. The primary objective is to facilitate innovative transformations of policies rooted in the first-hand experience of individuals.

The success of local or regional policies relies heavily on local stakeholder engagement, that can be facilitated through the combination of PD and placemaking. PD creates spaces for collaboration where diverse perspectives can converge to address shared challenges (Lindström & Stähl, 2016). Placemaking encompasses the intricate and context-specific aspects of urban environments (Graus, 2020); where local communities play a central role in determining the appearance and function of their surroundings (Courage et al., 2021). It is a socially charged process, tailored to the specific context in which it is applied. It enables collaboration between community members and various experts, (e.g., architects, urban designers, artists, policymakers, planners, developers, city administrators, and educators), ensuring equal agency for all involved. Additionally, it optimises existing assets of a place and encourages creative connections through economic, cultural, social, and environmental activities that shape and support its ongoing development. PD methods are deployed to give agency to stakeholders, shaping the design processes (Fuad-Luke, 2009) through dialogue in public engagements (Calvo et al., 2021), with the goal of co-articulating relevant issues (Vaajakallio, 2009).

The demand for the use of PD methods is increasing among design researchers, policymakers, and practitioners due to their ability to foster a third space (Bjögvinsson et al., 2012) where divergence and execution can be co-developed (Bason, 2010). This approach emphasises learning by doing (McCann, 2019), experimentation, and mutual learning (Calvo et al., 2022). By adopting a participatory approach, stakeholders' diverse needs and the volatility of external environmental factors influenced by global economic developments can be effectively addressed.

## 2.3 Roots of scenario planning

Scenario planning has long been used in strategic planning and gained significant attention in the 1970s, particularly in response to the oil shocks resulting from geopolitical events (Chermack et al., 2001). Attributed to Shell, it has been widely adopted in management as a strategy tool to respond to the increasing uncertainty and volatility of economic environments (Schwenker & Wulf, 2013).

This method is commonly employed to address future changes within organisations and involves the creation of multiple plausible future scenarios, encouraging participants to consider unconventional possibilities (Chermack et al., 2001) to test the resilience of proposed strategies. Over time, scenario planning evolved into various approaches with diverse processes and applications, but with a consistent requirement for engaging multiple stakeholders. Its application expanded beyond organisational and commercial contexts to the field of environmental science, where scenarios are developed for specific regions and serve as focal points in sustainability discussions. Many institutions adopt existing scenarios from organisations like the United Nations Environment Programme and adapt them to the relevant locations (Kok, 2009). Research has demonstrated that scenario planning is a valuable tool for facilitating interdisciplinary knowledge exchange and integrating placemaking expertise into decision-making (Allington et al., 2018).

In environmental literature, the term *participatory scenario planning* is often used to highlight stakeholder involvement. It is also frequently linked to policymaking processes, and many studies combine scenario planning with other methods such as back-casting, simulations, or the World Café (Allington et al., 2018; Palacios-Agundez et al., 2013; Oteros-Rozas et al., 2015). Malinga et al. (2013) note that scenario planning is now recommended as an integral part of environmental assessments in ecosystems.

## 2.4 Scenario planning for policymaking

Volkery and Ribeiro (2009) emphasise the benefits of scenario planning for policymakers who often navigate uncertain political, social, and economic landscapes characterised by complex, cross-cutting issues. Through scenario planning, policymakers can develop a deeper understanding of the interdependencies in the external environment. Their research highlights the participatory nature of scenario planning, which facilitates a broader debate between the public and private sectors, moving beyond strategies solely focused on individual organisations. They also explore the distinction between deductive and inductive methods, noting a potential tension between the more analytical approaches preferred by policy makers and the more open-ended approach associated with inductive methods.

Kim et al. (2022) outline the need for design to be recognised in strategic practice and planning. Scenario planning originated exactly for the purpose to aid organisations in futureproofing emerging strategies. In this regard, Smith and Ashby (2020) provide a comprehensive guide on *futuring* and acknowledge the importance of structured tools for developing future scenarios while also recognising the value of curiosity and discovery within the process.

# 3. Methodology

The I-Connect project is the result of an interdisciplinary, collaborative group of public and private sector partners: Groundswell Innovation, Connected Places Catapult and the Lancashire local authorities who collectively identified the need to investigate the impact that Eden Morecambe will have on sustainable innovation in the constituency.

Project participants listed in Table 1 were recruited with consideration for diversity and representation of those with highest stakes, influence, and impact in the active and sustainable transport research domain.

| Role                                   | Organisation                  | Type of organisation |
|--|-------------------------------|----------------------|
| Owner                                  | Atkinsons Coffee Roasters     | Private              |
| Inclusive Innovation Lead              | Connected Places Catapult     | Public               |
| Owner                                  | Ethel & Em Ltd                | Private              |
| Director                               | Groundswell Innovation        | Private              |
| Coordinator                            | Groundswell Innovation        | Private              |
| Innovation and Digital Lead, Economic  | Lancashire County Council     | Public               |
| Development                            |                               |                      |
| Head of Planning and Place             | Lancaster City Council        | Public               |
| Principal Planning Officer             | Lancaster City Council        | Public               |
| Service Manager - Planning and Housing | Lancaster City Council        | Public               |
| Strategy                               |                               |                      |
| Clime Change Policy Officer            | Lancaster City Council        | Public               |
| Member                                 | Lancaster Civic Society       | Third                |
| Senior Lecturer, Management            | Lancaster University          | Public               |
| Senior Lecturer, English Literature    | Lancaster University          | Public               |
| Carbon, Environment & Sustainability   | Lancaster University          | Public               |
| Manager                                |                               |                      |
| Co-Director                            | Luneside Studios Limited      | Private              |
| Director 1                             | Preston Trampower Ltd         | Private              |
| Director 2                             | Preston Trampower Ltd         | Private              |
| Partner                                | Renes Fashion                 | Private              |
| Director                               | Rosebank PR & Communica-      | Private              |
|  | tions                         |                      |
| Network Coordinator                    | The Ethical Small Traders As- | Third                |
|  | sociation CIC                 |                      |

Table 1 Future scenario planning list of participants



Figure 1 I-Connect Project Stages. Source: Authors

The overall methodology is grounded in Participatory Design (PD) with discrete project phases outlined in Figure 1. The methods deployed throughout the project include design methods such as participatory observation, sensory and visual ethnography, emotional journey mapping and persona profiling (Penin, 2018). In this paper, we focus on the stages of Place mapping, Diagnosis and Discovery that provided the foundations for the application of the generative future scenarios in the latter stages of Development and Impact.

## 3.1 Participatory design methods

The overarching research framework followed placemaking principles (Courage et al., 2020) and is informed by PD methods, drawing on Lewin's (1946) work. PD methods allowed us to advance the use of designerly engagement to ensure meaningful participation with individuals and their contextual factors (Ehn, 2017; Spinuzzi, 2005). The design research was tailored to foster transformative agency amongst the different stakeholders.

PD methods were deployed to collectively explore the different placemaking principles configuring the identity of each place on the path between Lancaster city centre and Eden Morecambe (Figure 2). We firstly deployed a thorough PESTEL analysis, informed by desk research on Lancashire 2050 (2023) strategic documents, the Levelling Up report (HM Government, 2022) and documentation sourced through the Lancashire County Council and Lancaster City Council websites. The analysis was then shared with the stakeholder group. After that, we used the future scenario planning method as a generative tool, following the approach of Visser et al. (2005).



#### Figure 2 I-Connect map of the researched area. Source: Authors

During the research phases of Diagnosis and Discovery (Figure 1), the scenario planning method was rigorously tested and evaluated. The critical uncertainties tool was employed for this purpose. The findings obtained from this evaluation were then used to inform the development of the scenario matrix, which facilitated the creation of the "four future worlds" (Chermack, 2022; Schwenker & Wulf, 2013). This method offers several advantages. Firstly, it does not impose preconceived scenarios, thereby liberating participants from linear problem-solving paradigms. Secondly, it embraces participatory approaches that leverage the expertise of participants and enhance the legitimacy of agreed outcomes. Lastly, it is grounded in real-world situations and is informed by quantitative data that policymakers are already familiar with through their engagement with policy documentation. The next section elaborates on the significance of these generative sessions in the context of placemaking.

# 4.I-Connect pilot study: towards Lancaster 2050

## 4.1 I-Connect context

Phase I of the project coincided with the Eden Morecambe award of £50m from the UK Government's Levelling Up Fund (HM Government, 2022) that seeks to reinvigorate economic development in deprived areas, and the publication of the Lancashire strategy report, a subregional strategy initiated by Lancashire's 15 councils. The geographic scope was a contested issue due to the heterogeneity of the county and the interdependency of policy areas, such as transport and environment. The consensus was to focus on Lancaster city with adjoining neighbourhoods, including Morecambe, reflecting the challenges in placemaking policy debates (Pugalis & Bentley, 2014; McCann, 2019).

## 4.2 Lancaster 2050 generative session

The generative session was conducted in the Lancaster Castle – a venue deliberately selected for its cultural heritage and location in proximity to the train station that encouraged public transport use. Following individual participant briefings about the scope and purpose of the project, the preparatory stage focused on appreciating the stakeholders' 'knowledgefrom-within'. For this reason, participants were invited to bring a piece of evidence to be shared in the forum and encouraged to plot the evidence onto the uncertainty/impact matrix. Participant groups were pre-set allowing a diverse mix of participants and combination of the public, private and third sector expertise (see Figure 3).



Figure 3 Participant teams are guided by research assistants to share insights and identify key drivers for change that are plotted on the uncertainty and impact matrix. Source: Authors

Additionally, taking an evidence-based approach to scenario planning, the research team prepared key facts and trends to further inform the plotting exercise. This complementary data aimed at adding objective evidence from a variety of sources to reduce bias towards participants' areas of interest or expertise.

The outcome of the matrix mapping revealed on the one hand, the strong interconnectivity of challenges facing the county, and on the other, the siloed policy making, decision-making and neglect of human-centred approaches. E.g., in discussing the need for multi-modal transport, a local policymaker observed:

"... if we want to have active and sustainable travel then we should be able to walk to a bus stop, take the train, switch back to being a pedestrian, or a cyclist, or a bus user. But our current infrastructure planning does not consider this, and we do not have any data to inform multi-modal transport."

The discussion supported participant agreement on two critical uncertainties that formed the baseline for the 2x2 scenario matrix and concluded the structured and analytical phase of the scenario planning process:

- 1. The future of transport planning, innovation, and public attitude to transport
- 2. Quality of life including personal wellbeing, health, economic prosperity, and environmental sustainability



Figure 4 Critical uncertainties and impact matrix derived from stakeholder insights. Source: Authors

The final step focused on developing the future worlds, based on the critical uncertainties (see upper right corner on Figure 4). This was carried out in newly formed groups for greater knowledge-exchange between participants. This phase was facilitated in a more open, intuitive, and creative way, placing emphasis on non-prescriptive story construction and delivery with access to a various visual material. This phase radically departed from the evidence-driven analysis and focused, instead, on human interaction with the future of the place and resulted in the creation of four worlds (see Figure 5).

The worlds were constructed within the 2x2 matrix with the critical uncertainties forming the demarcation for the future world scenarios. The participants' narratives varied for each group and shared high levels of creativity, imagination, abductive thinking, and human-centricity, combined with a sense of urgency and call for action. All narratives highlighted human-centred storytelling, demonstrating the strong connection between the socio-economic development and environmental changes affecting the quality of life and the complex role of transport and wider impact on mobility.



*Figure 5 2x2 future scenario matrix outlining the parameters for the future world story development. Source: Authors* 

The initial correspondence from the future, specifically **Postcards from 2050**, emanated a sense of optimism among individuals. This collection, representing Lanctopia's vision (depicted in Figure 6), fostered a collective sentiment of anticipation and yearning for an ideal environment wherein human beings and nature seamlessly coexist:

"Having a great time on my course in *Lanctopia*, it is so liveable here. I'm staying in the co-housing complex. It's a mixed multigenerational community ... I can walk to the Lancaster Uni Storey hub via the pedestrianised King Street. The journey from London on the new H55 is good. Planning to go to Eden Morecambe on super tram tomorrow." (Lanctopia group)



*Figure 6 Set of postcards describing the idyllic life in Lanctopia with photos of happy people enjoying nature. Source: Authors* 

**Mind map of networked-community**: Figure 7 illustrates how *Slowcaster* revived the notion of the COVID-19 lockdown when citizens were unable to travel and relied on technology for connection. The community was presented as a network of tribes with the following introduction:

"It's going brilliantly well, there is no pollution...All the agriculture slowed right down as well. So, it's all organic and biodynamic and it's with the seasons. There are computer systems that just work out how to optimise everything and we've got robots to do the weeding, if you want. But a lot of people like to do the weeding cause it's just like this slow activity of a manual task." (Slowcaster group)



*Figure 7 Slowcaster group participants presenting their future world story with a visually enhanced mind map. Source: Authors* 

*Nodecaster*'s overemphasis on transport with significant neglect of the environment showed how sophisticated transport may come at a cost. This rather sad scenario with the quality of life that has significantly deteriorated whilst the transport has become superefficient was narrated through **a story supported by key themes ranked on postit-notes** (Figure 8):

"Further good news arises from the fact that there are now no animal or road traffic deaths at all; unfortunately, that is because there are no animals, they're all dead." (*Nodecaster* group)



Figure 8 Nodecaster group participants presenting their future world story with visually enhanced thematic post-its developed by individual team members and plotted onto the matrix. Source: Authors

*Lancastrophe*'s team in Figure 9 struck the participants with a **BBC news broadcast** reporting the following introduction from the future:

"Hello and unwelcome to the BBC breaking fast show on Thursday, February 23<sup>rd</sup>, 2050, reporting live from *Lancastrophe*. We hope that you have enjoyed the last free 0.5 millilitres of clean oxygen that were granted to you in the past weekend as a thank you for choosing to stay in this region." (*Lancastrophe* group)



*Figure 9 Lancastrophe group participants presenting their future world story with a visually enhanced poster aiding their broadcasting method. Source: Authors* 

The participants acknowledged that none of these four worlds would materialise in its entirety, and it is likely we would live a combination of the four scenarios. In this regard, the Lancastrophe group said:

"Our scenario is possible. It is not so utopian if we simply continue as if nothing is happening. If we just turn a blind eye and remain completely oblivious and take everything for granted and don't consider our resources being finite."

After the generative session, the narratives and artefacts were synthetized into four posters and disseminated to the stakeholders as a part of the project progress report. For the I-Connect project, the visual representation of the four worlds accompanied by the narratives served as a constant beacon guiding the data collection process and most importantly, the final stages of the project that focused on prototypes for active transport policies in the context of the four future worlds.

## 4.3 Findings

Drawing upon Salinas' (2022) research, our adaptation of the participatory future scenario planning to inform local policymaking on sustainable transport was well-received by local policymakers. This approach provided valuable external expertise and capabilities, while also establishing a secure environment for experimentation. It allowed for imaginative thinking that transcended traditional adherence to processes, hierarchies, and evidence. In addition to policy implications and outcomes from the future scenario plans, policymakers valued the transferable skills acquired in comprehending the mechanics and application of this method, which, as they pointed out, could also be applied to other policy enquiries.

The development of the four distinct scenarios enabled all participating stakeholders to grasp the interconnectedness and intricacy of policy decisions. The novelty of our approach to local council representatives, some of whom encountered their colleagues from different departments for the first time during our project, further underscores two noteworthy observations. Firstly, it highlights the compartmentalized nature of local councils, even within

relatively small constituencies. Secondly, it underscores the inadequacy of training programs and the limited implementation of design-led civic engagement within local government.

Three key themes emerged from the participant discussions and feedback:

#### 1. Interconnectedness between strategic priorities

Lancashire 2050 priorities must be considered as interconnected, and policies established in these areas need to be reviewed considering this interdependency. Addressing these priorities must take a citizen-, not a policy-centred stance. The participants acknowledged facing the challenge of approaching innovation in these areas from a siloed position, and proposed an interconnected view of the priorities, taking a citizen-centred, as opposed to function centred approach.

## 2. Legacy issues in policymaking

Policy planning and resulting decision making is largely dependent on past data and legacy paradigms. There is a need to shift our linear thinking that is targeted towards optimising existing solutions, to allow for more transformational and diverging considerations of innovative policies for the future.

#### 3. Complexity of measuring the policy impact of placemaking

Policy is often mapped to national KPIs that do not always effectively translate into locally viable objectives. It is essential to incorporate placemaking measures of success and to develop measures for desirable future policies, such as multimodal transport.

The multi-stakeholder scenario planning formed the overall project thread that led to heightened consideration of future policies concerning active and sustainable transport between Lancaster and Eden Morecambe. Taken together, this body of evidence equipped policymakers with tangible action points that take a human-centred and place-sensitive approach to designing future transport policies in the region.

## **5. Discussion**

Our case explored how we can integrate placemaking principles and use PD methods into local policymaking processes and outputs in the context of sustainable transport. By evaluating the progress made by PSI Labs, it is argued in this paper that their exclusive focus on national policy has potentially neglected the needs of regional and local policymakers who are grappling with outdated systems, processes, and resource limitations (UK Parliament House of Commons, 2022). In light of this, our research offers an alternative approach by prioritizing design in the decision-making of local policymakers. This is achieved through the provision of design method training and the integration of a designerly approach into policymak-ing processes and outputs. Our methodology combines the 2x2 Shell method (Chermack, 2022; Schwenker & Wulf, 2013) with creative and imaginative storytelling and prototyping of

future scenarios (see Smith & Ashby, 2020). By incorporating both quantitative and qualitative data, as well as insights from lived experiences, our approach ensures greater credibility and acceptance among policymakers. Furthermore, it introduces policymakers and the public to new forms of data that extend beyond the conventional realm of evidence-driven policymaking. In this respect, participant 1 noted: "designing the future based on past data perpetuates path dependency; but creating a future without any data is impossible, too."

The contribution of our I-Connect case is threefold:

#### Placemaking

The use of the future-worlds method opened an explicit dialogue about the need for policies to consider wider, interconnected stakeholder needs. Although the future worlds presented somewhat extreme scenarios, they helped articulating the fears, concerns and hopes of the participants and transformed the Lancashire 2050 strategy document into an accessible, visual and human-centred debate that all participants co-created through dialogic sense-making (Cunliffe, & Scaratti, G, 2017).

Drawing on participatory design methods such as storytelling and visualisation enabled us to introduce a non-linear, human-centred approach to policymaking with participants voicing their surprise at "the power of imagination". In alignment with Smith and Ashby's (2020) approach on *futuring* and Chermack's (2022) work on sensemaking, our research highlights the participants' appreciation of the value of breaking linear thinking by imagining an end-state and reverse engineering the conditions that are necessary to create it.

## Co-design of future vision for the place

The use of participatory design principles appreciated by participants who praised the 'creativity and design of facilitation methods', 'open-mindedness and creativity of everyone involved' and the 'freedom to create scenarios without realistic expectations and limitations'. In line with existing research (e.g., Allington et al., 2018; Palacios-Agundez et al., 2013; Malinga et al., 2013) our findings confirm that scenario planning facilitates communication across silos and professional affiliations and generates transdisciplinary knowledge. This notion of 'opening up participation through design' (Kimbell et al., 2022, p.5) and materialising the co-participative process and outcomes through visuality and materiality (ibid) permeated our project and was highlighted by participants as powerful and unusual.

## Network learning

The main advantage and value of the participatory scenario planning method was to encourage an integrative approach to policymaking that enabled a place-sensitive, human-centred and holistic approach that bridged the schism between compartmentalised local constituents and various community stakeholders. Participants noted in their feedback that the project helped them expand their network and understanding of the place as an interconnected ecosystem. We echo and extend the work of Volkery and Ribeiro (2009) who observed that: "The compartmentalized structure of modern governments is a key barrier to more integrated policy thinking and decision-making, which is indeed a key aspiration of scenario planning. In addition, policymakers and strategists often have not only different time horizons than scenario planners, but also very different attention foci" (p. 1205).

In line with Wack's (in Chermack, 2022, p. 78) observation, participants noted that scenario planning provoked a sense of wonder and left some with more questions than answers, noting that 'there are many paradoxes in the solutions'.

# 6. Conclusion

This study provides an important contribution to research on integrating design practices into *local* policymaking. Firstly, it provides the foundation for advancing research on the development of evidence-based and futuring methods. Secondly, it illuminates the value of combining it with placemaking principles and the PD approach to further enhance the policy design process. This tandem enabled us to assemble an approach that is deemed more legitimate by policymakers as it combines data with the creative opportunity to define the future worlds. While our study highlights the untapped potential of design-led innovation in *local* policymaking, it also revealed several obstacles that hinder wider adoption: The significant financial and human resources constrains faced by local constituencies, and the limited investment in developing relevant professional skills training programs echo Anderson's (2023) observation that public institutions are underequipped in handling the increasing complexity of policy challenges.

To address this critical issue, our study lays the foundation for developing a more systematic approach to local policy innovation by activating four key stakeholders: the university, public, private and third-sector actors. The use of the evidence-driven future scenario planning method, combined with the design of future worlds for the purpose of placemaking, has proven to be an effective approach for improving public participation in local policymaking. Moreover, the futuring method enacted the principles stated in Bason's (2010) work on the value of co-creation: it recognises the value of co-creation and collaboration among diverse participants who aim towards a collective, placemaking outcome.

The project consortium has progressed onto Phase III Implementation of the I-Connect project (see Figure 1). This involves the use of immersive future scenario experiences that enhance the consideration of alternative evidence, and reflective practice in policymaking.

Our method has created a sense of urgency to act on the climate emergency, which has been the main city council agenda. Our intervention generated community empowerment that resulted in the emergence of a voluntary group, Greenway Connect, which is now led by the project partner Groundswell Innovation. The outputs of the future scenario planning method have since formed evidence for bid proposals that advance mobility solutions to reduce isolation in rural communities.

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