



DELIVERING BETTER PLACE OUTCOMES THROUGH USE OF DATA:

BUILDING ON THE EMERGING DIGITAL PLANNING SYSTEM

STANTEC AND UNIVERSITY OF READING | JULY 2022



FOREWORD

The UK planning system is under pressure to deliver more for less. Build back better, faster. More housing, more jobs, more biodiversity, less carbon, better communities, better value. It's a big agenda, whilst at the same time there is wide recognition of the shortage of skills required to deliver it.

As we grapple with these challenges, we are also seeing digital planning become mainstream. The pandemic showed us how effective digital techniques could be in planning, and digital innovations are now seen by Government, and many practitioners, as providing a route to better planning outcomes. As a result, we quickly need to develop a better understanding about how the use of data can be a force for good in planning, and how we can avoid the inevitable unintended consequences.

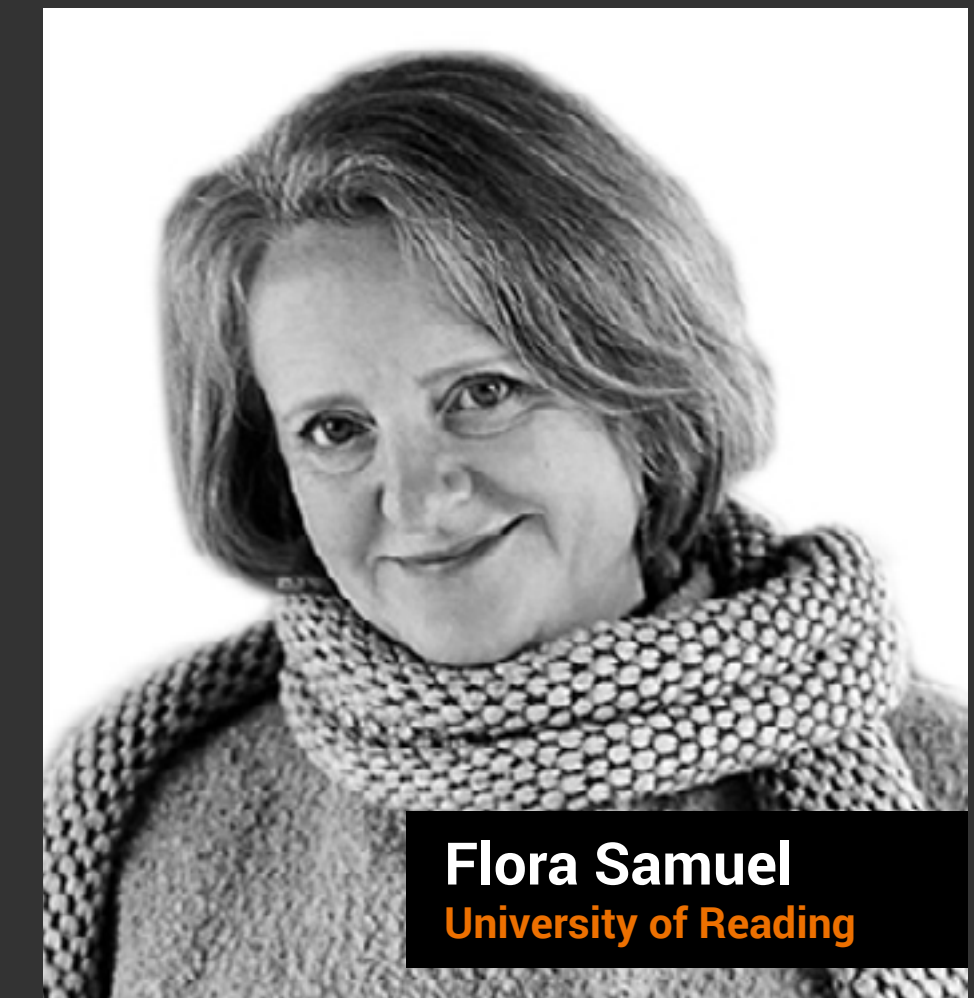
Stantec's Better Places research programme with the University of Reading has been contemplating these issues. It builds on our Places First research, which set out in 2018 to propose solutions to deliver better communities, fit for the future. In 2018 Stantec published its first paper which set the foundations. It concluded there is a need to reinvent the way we promote development through the planning process so that it better delivers the conditions for effective planning and delivery of good growth.

Our 2019 publication proposed how to achieve this through a vision and validate approach to delivering local plans and developments. The Better Places research dives deeper into the emerging area of digital data-based planning.

The Better Places research has been studying how data can enable social value factors to become a more integral part of evaluation, and how digital engagement and mapping could be used to improve engagement, and enable better decision making for and on behalf of planning authorities, investment organisations and developers. Our report follows hot on the heels of 'A Digital Future for Planning' (Digital Task Force for Planning, 2022), and dives into more detail on the role of data and maps. It is crucial the Levelling Up and Regeneration Bill (Department of Levelling Up, Housing and Communities - DLUHC, 2022) and the proposed digital transformation of planning services realises the systems thinking and delivers evidence-based decision making so sorely needed. The Better Places team has collaborated widely across the world of planning and development, and it is clear that this work is very timely and relevant.

Keith Mitchell, Stantec UK

To right- Better Places Research Team and authors of this report.





CONTENTS



SECTION 1

INTRODUCTION

Open passive and active data should be at the heart of the planning system

The Levelling Up and Regeneration Bill, put before parliament in May 2022, seeks to establish a modern digital planning system where planning data is standardised, easily accessible and openly available. We wholeheartedly embrace these changes.

In this report, we argue that planning and delivering better places starts with understanding place and the communities that live there. We fully support the view proposed in the Bill that data gathering, analysing and sharing through open digital maps is key to making informed decisions on the issues that will affect generations to come. But we would like this to go further.

Here we make the case for a National Place Portal which combines open “passive data”, drawn from existing datasets such as the Census and Index of Multiple Deprivation, with “active data” developed in real time with community input. Where appropriate data mining and sentiment analytics should also be used to determine what is important to communities, in parallel with other engagement methods to ensure all members of communities can feed into the process.

Giving the public a meaningful role and having standardised format for data analysis and mapping outputs that brings together real time intelligence on social, environment and economic value would give greater visibility to issues which by being difficult to quantify are often overlooked in decision-making. It can also help to put communities at the centre of the development plan and development management processes in the UK, as set out in our Places First report, *Creating Communities fit for the Future: Repurposing the Development Plan process, 2018*.

The ready availability of open, understandable data maps is vitally important for democracy, enabling people to get involved in decision making about their place, informally through consultation and more formally through participatory planning (Batty and Yang, 2022)

This work is the latest outcome of the broader Better Places research project, an Innovate UK Knowledge Transfer Partnership between Stantec and the University of Reading which aims to make it easier for local authorities, land promoters and developers to include social value in strategic decisions around land. The focus of this report is the planning system in England, but we include best practice from other nations of the UK where relevant.

Our vision for change(xref) has been informed by workshops with stakeholders, eight formal academic interviews with industry experts and case studies(xref) showcasing great examples of how community engagement and digital data sharing can help informed decision-making.

This is just the beginning. We are currently testing the principles outlined in this report in a DLUHC PropTech funded project. Working with the Quality-of-Life Foundation and supporting the Harlow & Gilston Garden Town DLUHC Digital Land project, we are now mapping existing passive data against the Harlow area in order to create a social value baseline for the project. Community engagement is running through the summer, and we will be working with the Quality-of-Life Foundation to compile a full report later this year.

Watch this space.



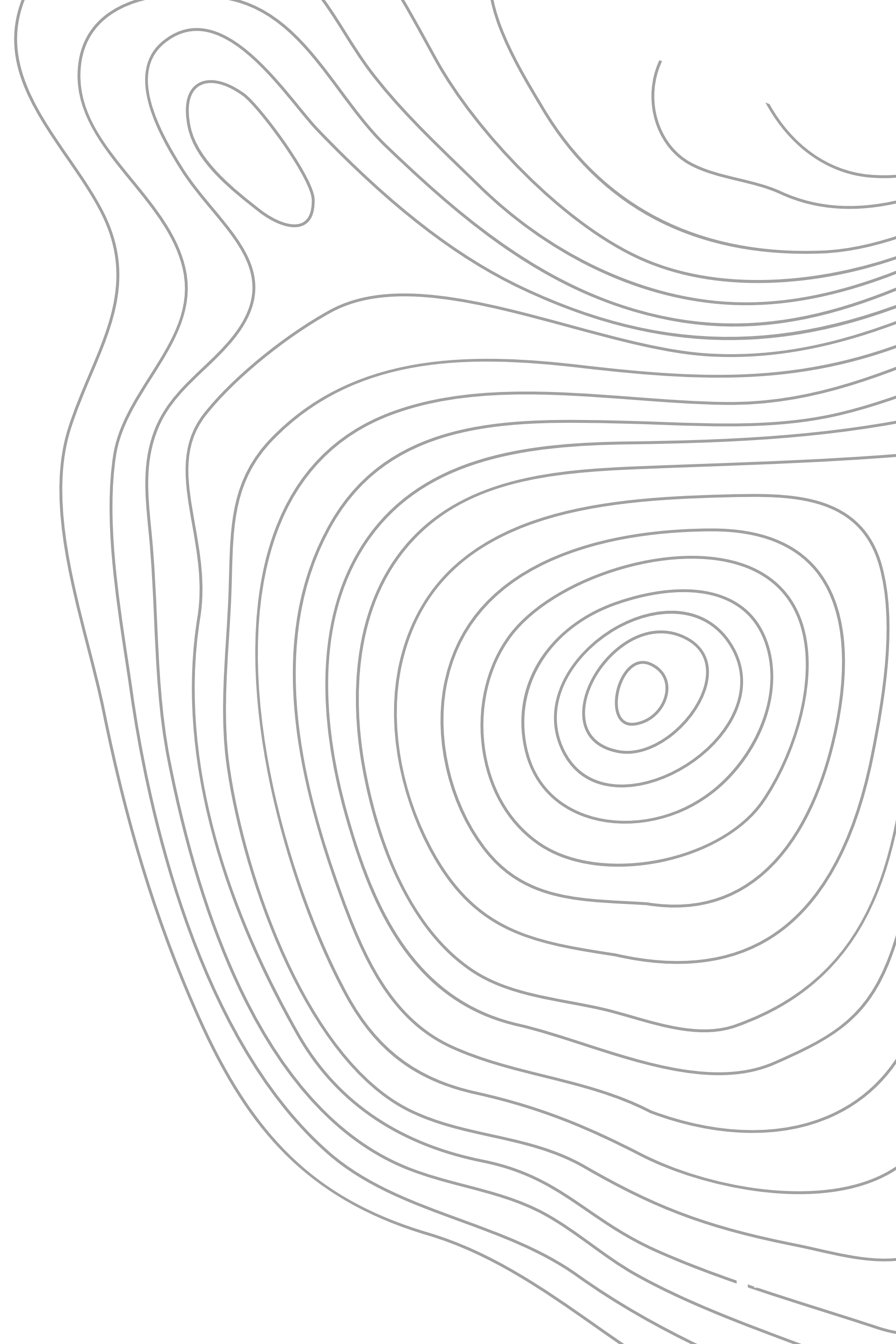


SECTION 2

PLANNING FOR BETTER OUTCOMES:

THE BIG PICTURE

We are facing complex, systemic challenges but there is an opportunity to address this through collaboration built around digital planning.

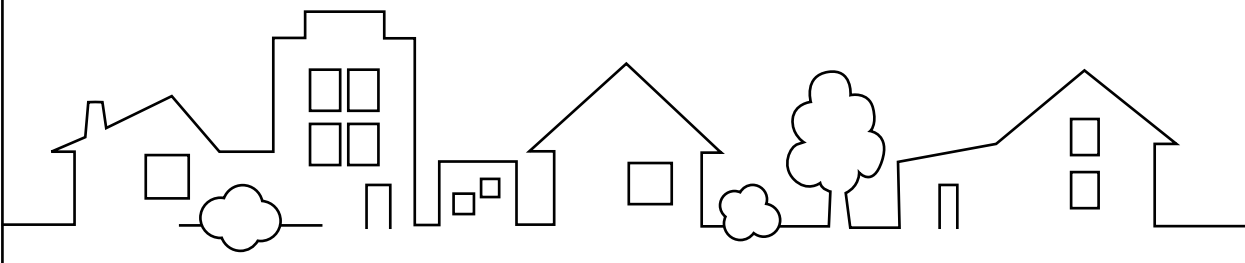




Planning system has a key role in addressing challenges such as:

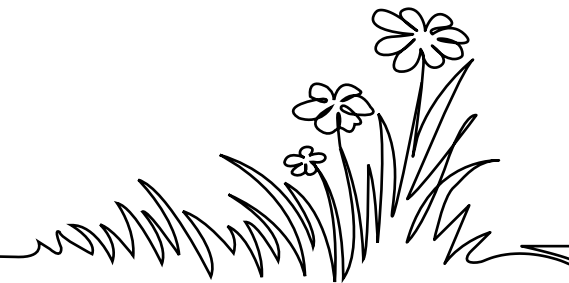
MORE HOUSING

England needs **340,000** new houses a year, **145,000** of which should be affordable (Wilson and Barton, 2022). **243,775** new homes (70% of the target) but only **52,100** affordable homes (36% of the target) were completed 2020/2021 illustrating the shortfall in affordable housing delivery.



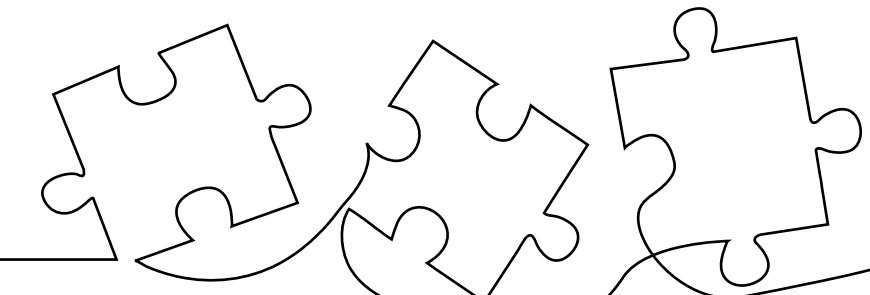
MORE BIODIVERSITY

Currently **8.3%** of land in England is built on, with another **2.2%** needed for new housing by **2060**. Land is a valuable and scarce resource, and our sector has a responsibility to ensure the right things are built in the right places (Department for Environment Food & Rural Affairs, 2021). In parallel, the Environment Act (2021) has announced proposed long term environmental targets including “to create or restore in excess of **500,000** hectares of a range of wildlife-rich habitat outside protected sites by **2042**, compared to 2022 levels”.



BETTER JOBS

The levelling up agenda seeks to tackle regional disparities across the UK, and address uneven outcomes in health, skills and productivity. Over half of those living in poverty are in working households, and over **one in seven** jobs in every region and nation is paid less than the Real Living Wage (see TUC, 2021).



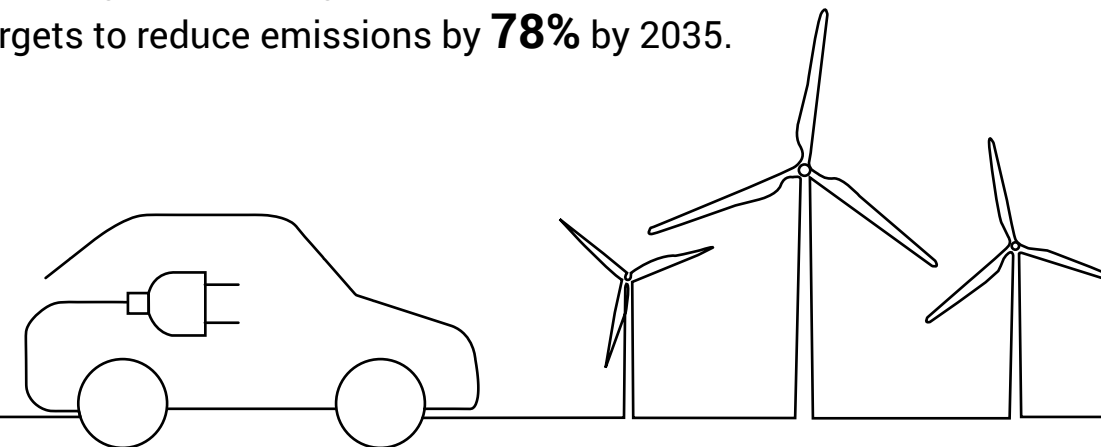
BETTER COMMUNITIES

Communities cannot thrive without access to affordable and good quality housing, transport, jobs, education, health, leisure and cultural opportunities. Around **12.4%** of the land area of England is designated Green Belt (DLUHC, 2021). Green Belts place physical barriers around where growth is allowed when extending urban areas, which may exacerbate problems with having sustainably connected new settlements. **One in three** people in England cannot access quality green spaces near their home (see Horton, 2022).



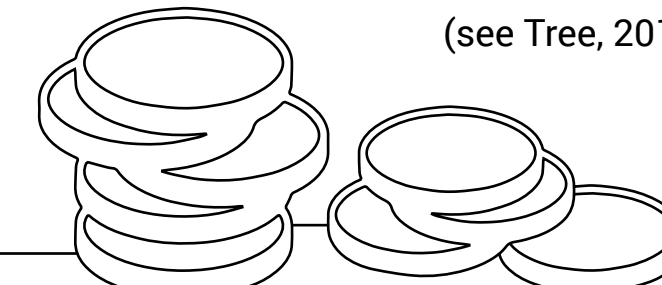
LESS CARBON

Typical new greenfield development has **2-3 car** parking spaces per home with public transport connections not embedded into all neighbourhood design (Transport for New Homes, 2022). Of the **£900M** allocated by the Housing Infrastructure Fund up to April 2020, **£700M** was spent on roads. This is incompatible with our climate goals and targets. The UK has enshrined targets to reduce emissions by **78%** by 2035.



BETTER VALUE

Current forms of decision making valorise economic value above other sorts of value (see Raworth, 2017), resulting in a system skewed to particular kinds of outcomes. There is a need for holistic valuation systems that take into account social and environmental, as well as economic impacts. Many argue that we need a **new way to value land** to justify decision making on change of use, for example citing the case that there can be greater biodiversity on brownfield sites than agricultural land currently protected in Green Belts (see Tree, 2018).





We need to bring together different approaches to solve big challenges

Momentum is growing to deliver better social and environment outcomes due to the combination of a number of policy, financial and social drivers. Different fields are advancing a variety of approaches. This is a positive direction of travel. But lack of alignment is holding us back.

The Levelling up and Regeneration Bill sets the foundation for an updated planning system to 'level up the country'. This comes against a backdrop of legislation and regulation that are already playing a significant role in shifting culture and behaviours towards sustainable development and social value.

The Public Services (Social Value) Act 2012 requires public sector commissioners in England (and some in Wales) to consider how they could improve the economic, environmental and social wellbeing of their local area through their procurement activities.

Investment and financial services are driving developers and property industry to engage with social value through Environmental, Social and Government (ESG) requirements. Listed developers and housebuilders face greater scrutiny from shareholders and investors to demonstrate their commitment to ESG.

Those supporting ESG are already taking advantage of advances in research and practice happening in relation to community participation and consultation, digital planning infrastructure, climate and ecological emergency responses, and bringing together the health, wellbeing and psychology fields with the planning system.

However, there is currently a lack of alignment between the related fields of housing, infrastructure, agriculture, forestry, land use, health and culture. This is partly because these fields sit in different Government departments and partly because of a lack of alignment between professions, particularly in planning, the built environment and creative industries.

Digital maps can aid simplicity

Digital planning sits across all of these spheres and, through measures proposed in the Bill, has the

potential to bring them together into a cohesive whole.

The challenges outlined on the previous page have a spatial lens. It is immensely important that the Bill, and its delivery, uses the best available and consistent evidence to ensure decision making and investment is channelled to maximise better outcomes and better places.

We need a system that looks at these issues overall and brings together the evidence for decision making. Digital maps that bring together up-to-date data on social, environmental and economic value should be the basis of a digital planning system which grapples with a plethora of challenges.



SECTION 3

DIGITAL PLANNING IS IMPORTANT TO ENABLE BETTER DECISION MAKING

What do we mean by digital planning?

At its heart, digital planning is about using modern (digital) technology to enable better local, regional and national planning services that work for users. This is about using advances in technology and software and applying these to make our planning system more automated and intelligent. Digital planning also creates the opportunity to make planning more responsive to environmental, social and economic objectives (Royal Town Planning Institute, 2019). As advocated in the Digital Future for Planning Report (Digital Task Force for Planning, 2022), a transformative digitalisation of spatial planning should be a people-centric process which is enabled by digital technologies. Spatial planning “can offer a unique place-based systems approach to coordinate multisector efforts to deliver zero-carbon, environmental net gain, a circular economy and a green industrial revolution for a fairer society”.

The Government’s Planning for the Future White Paper (MHCLG, 2020) speaks of the opportunities in moving towards a more accessible and transparent planning system resulting in better decision making. The call for digital changes is to make processes across the land development cycle better, with digitised platforms, increased use of interactive maps, intelligent data use and enhanced community engagement.

What is the current state of play?

The UK is partway through a significant shakeup en-route to the future of digital planning. In parallel there is industry-wide encouragement of better social value creation through the planning process, alongside the emergence of better spatial data use. There is a wide range of activity focused on digital planning systems, often referred to as PlanTech (Planning Technology) or PropTech (Property Technology) for shorthand. This includes financial initiatives such as the PropTech pilot funding available from DLUHC for local authorities, discussed in more detail in the [Case Studies](#).

Property technology, also known simply as PropTech, can be defined as the use of technology and software for the property and real estate market. This is one part of the wider digital transformation of the property and construction industry and the global fourth industrial revolution. This includes technology-based platforms which facilitate the operation and management of real estate assets.

However, the planning system is under stress, with resource and capability challenges facing local authorities. The industry is generally still using traditional practices and relying on paper-based reports to ensure quality and safety of work, albeit with some larger entities such as the Greater London Authority (GLA) and Greater Manchester Combined Authority (GMCA) delivering digital planning practices and providing open data portals. The 5-year cycle plan-making process generally results in static

maps, policies and processes, that have limited flexibility and opportunity for communities to engage in the future of their places. The challenge is multi-layered, with digital skills capability gaps in local government, a historic lack of investment in new tools across local government, limited data standards, and the use of legacy softwares, with limited digital external capabilities. More progress has been made in science and technology, which now needs to be applied to the planning world.

‘Urban planning, both research and practice, has a lot of catching up to do. The science and technological communities have marched on, developing innovative tools’ (Wilson and Tewdwr-Jones, 2022, p.16). Wilson and Tewdwr Jones suggest that planners should become the ‘digital guardians’ of data.

The UK Government aims to unleash the potential of the planning process to deliver development where it is most needed. It is expected that the planning reforms could deliver the economic growth and increased quality of life needed across all regions of the UK by tapping into new digital and data skills areas (Planning for the Future, White Paper 2020). This can only be achieved if decision making adequately factors in community and environmental impacts and outcomes. We are at a crunch point – momentum is building towards the future of digital planning, and the vision is in place for value-based decision making, but more investment, focussed effort and guidance is needed to push things forward.



Data-led decision making and the use of active and passive spatial data is a crucial foundation for digital planning

Digital maps and spatial analytics enable better judgements to be made about development impacts, both positive and negative, on communities. Objective spatial data sources can be layered, aggregated, to provide a richer understanding of place and context, to inform decision making.

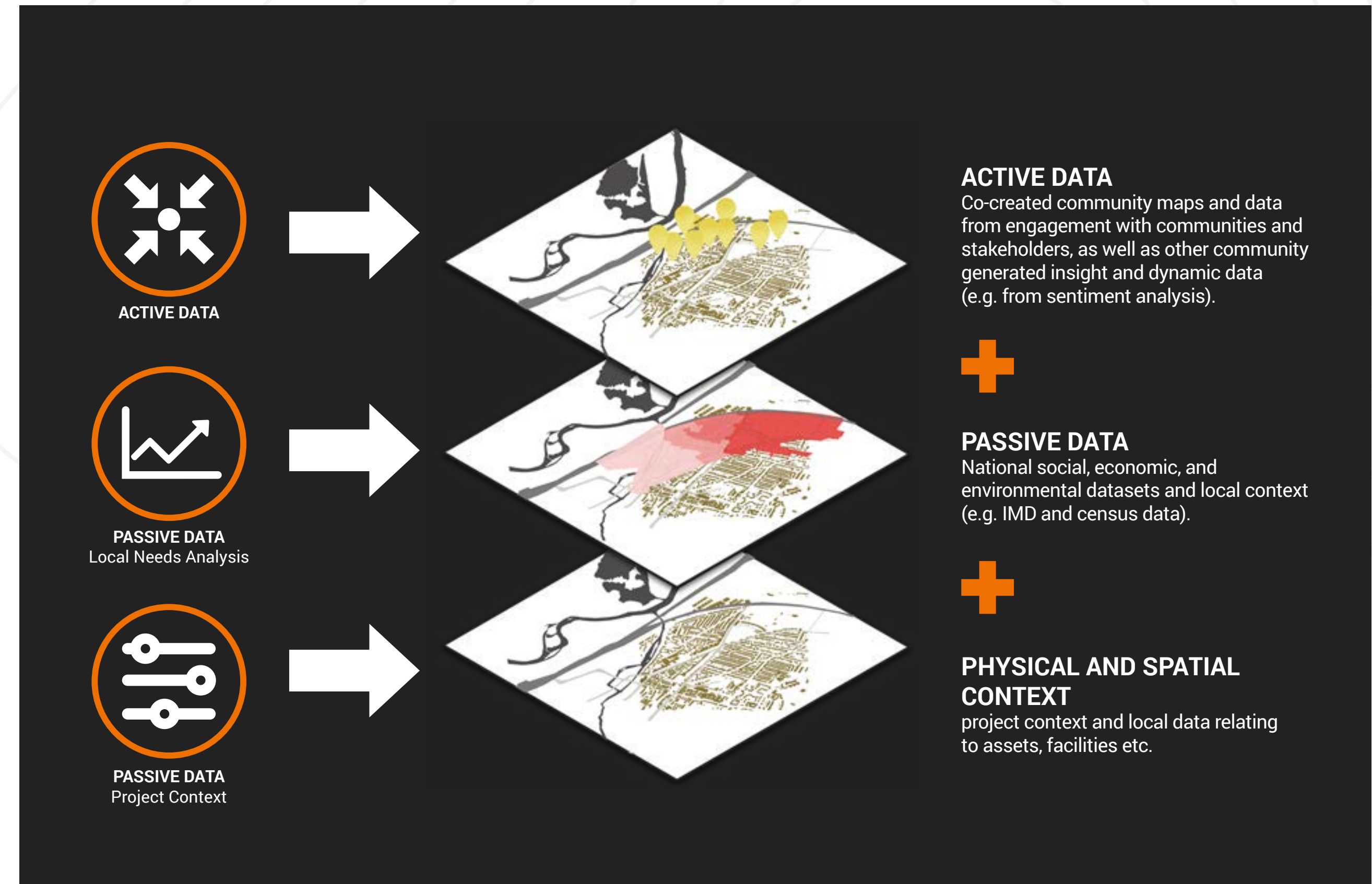
Stantec has been working with the University of Reading and the Quality of Life Foundation to develop a map based system for capturing social value through the use of multi-layered passive and active data maps.

PASSIVE DATA is information that is derived from surveys such as the Census, sensors and other automatic data collection activities.

ACTIVE DATA is developed through the co-creation of community generated insight and includes, for example, social value maps using digital consultation platforms, and insight from data mining (e.g. from social media) and AI applications. Crucially, these datasets can form the basis for a robust system of monitoring and evaluation as a project progresses.

Standardised and agreed data sources for digital maps that bring together real time data on social, environmental, and economic value – the commonly used triple bottom line of sustainability - should be the basis of any future digital planning system. The public should have a meaningful role in the process and making of digital outputs, thus improving community ownerships of the plans developed on its behalf. Digital maps have the potential to be the Building Information Models of place, enabling better decision making, and in turn, delivering better places.

The figure below indicates different 'layers; within a map-based system for capturing and analysing social value through the use of multi-layered passive and active data maps. Together, these layers can create a powerful summary of social value in a particular area.





SECTION 4

CHALLENGES TO IMPLEMENTING DIGITAL MAPS THROUGH DATA-BASED PLANNING

There is a lack of standards and agreed processes for developing and using data-based planning systems at the local level

Local authorities need clear, step-by-step guidance and standards to develop data-based planning systems. This is not about policy; it's about providing clear guidance on processes to develop effective data-based planning and value-based decision making. There needs to be a consistency across local authorities.

Various bodies have proposed visions for end-to-end digital planning processes, and the government are funding the development of tools, processes and services. More 'stick and carrot' is needed; regulation to ensure uptake across the UK happens and both public and private stakeholders play their role. Resources and support to enable local authorities to lead this at a local level.

More examples and evidence of good digital planning are needed, alongside clearer mechanisms to share and collaboratively deliver better practice

There are too few case studies which provide the evidence needed to demonstrate that they work and provide benefits for all stakeholders. We need to go beyond the assumed, or intrinsic benefits of what digital mapping will bring and build cases to demonstrate pragmatic outcomes. This evidence is needed to persuade laggards and support leaders alike.

It is crucial that, in parallel, effective, simple, mechanisms are developed to share best practice. There are a range of proactive industry bodies (e.g. Connected Places Catapult, RTPI), but digital, data and map-based planning doesn't have 'one home' or professional institution owning this agenda. More collaboration and resource and research sharing across organisations and projects is needed.



Systems thinking is lacking in the built environment, development, and construction industries

Systems thinking requires that all key issues and stakeholders that have an interest and an influence on a place or a system need to be considered and understood early on and factored into project design.

Currently there are some glaring gaps in how we're framing our problem-solving from the outset for built environment projects. For example, climate risk and adaptation considerations are overwhelmingly lacking. Only half of local authorities have adaptation plans in place (Kuhl, 2022) and less than 12% of local authority climate emergency declarations mention adaptation to climate change (Howarth and Fankhauser, 2021), such as addressing the risks of climate change like flooding and heat.

A whole systems' approach is clearly essential to thinking and acting on the impact of climate change (and biodiversity decline) in the immediate and near-term future.

“ Systems thinking is a way of exploring and developing effective action by looking at connected wholes rather than separate parts. Systems thinking is a powerful approach to support evidence-based decision making and is essential to successful delivery of complex projects where there are many stakeholders and many possible solutions.”

UK Government Office for Science, 2012

Too often our approach to planning and development is fragmented. This leads to the dilution of value across the planning lifecycle and disappointing outcomes are a common theme across the country. Systems thinking is key to making change happen. It has been used to get humans on the moon, and transform major corporations.

Effective digital data-led planning is an example of systems thinking in practice. When applied early in the planning process alongside robust impact and outcome frameworks, it can help contribute to better places. Collating and analysing datasets can feed into a more detailed and robust local needs analysis and review of social value context. Systems thinking requires a 'people-focused' approach, early community engagement, and willingness to listen to different voices. A challenge we need to overcome is justifying investment at this early stage.



Decisions are currently based on partial information and continue to underplay the importance of many social and environmental issues

It is much harder and more ethically challenging to quantify community issues and considerations- which means they are underrepresented in decision making, and underweighted in investment decisions. There are data gaps in relation to key facets of sustainability.

Using digital maps and incorporating, for example, health and wellbeing statistics, makes it clearer what the issues are, and makes it more possible to assess what the impacts are of different development options. In an increasingly data driven environment we have to find ways to capture intangible impacts or they will not figure in digital twin city models, BIM or value based procurement (CIH, 2021).

Successful community engagement through the planning system is held back by many factors

There are a number of factors that get in the way of effective and successful consultation and engagement in the planning system. One challenge is the lack of understanding that better engagement can lead to better places and economic return. Current methods of consultation are known to engage with limited population groups. Barriers include a lack of awareness of planning, and low and negative engagement with the planning system. Digital tools and engagement need to go hand-in-hand with in-person engagement to create longer term connection. Community participation is known to have major benefits in terms of resilience and wellbeing and bottom up-participation is needed to ensure long-term sustainability.



SECTION 5

OUR VISION FOR CHANGE

Towards a National Place Portal

We are facing huge systemic challenges in the UK to level up and 'build back better', combined with other huge challenges including the climate and ecological emergencies. This creates a perfect storm of debates, which the planning system has a key role in addressing. Open, digital data-led planning is critical to enable and deliver systems thinking and to prevent siloed approaches.



“ Digital maps that bring together real time data on social, environmental and economic value are the basis of a digital planning system which delivers more informed decisions and sustainable outcomes.”

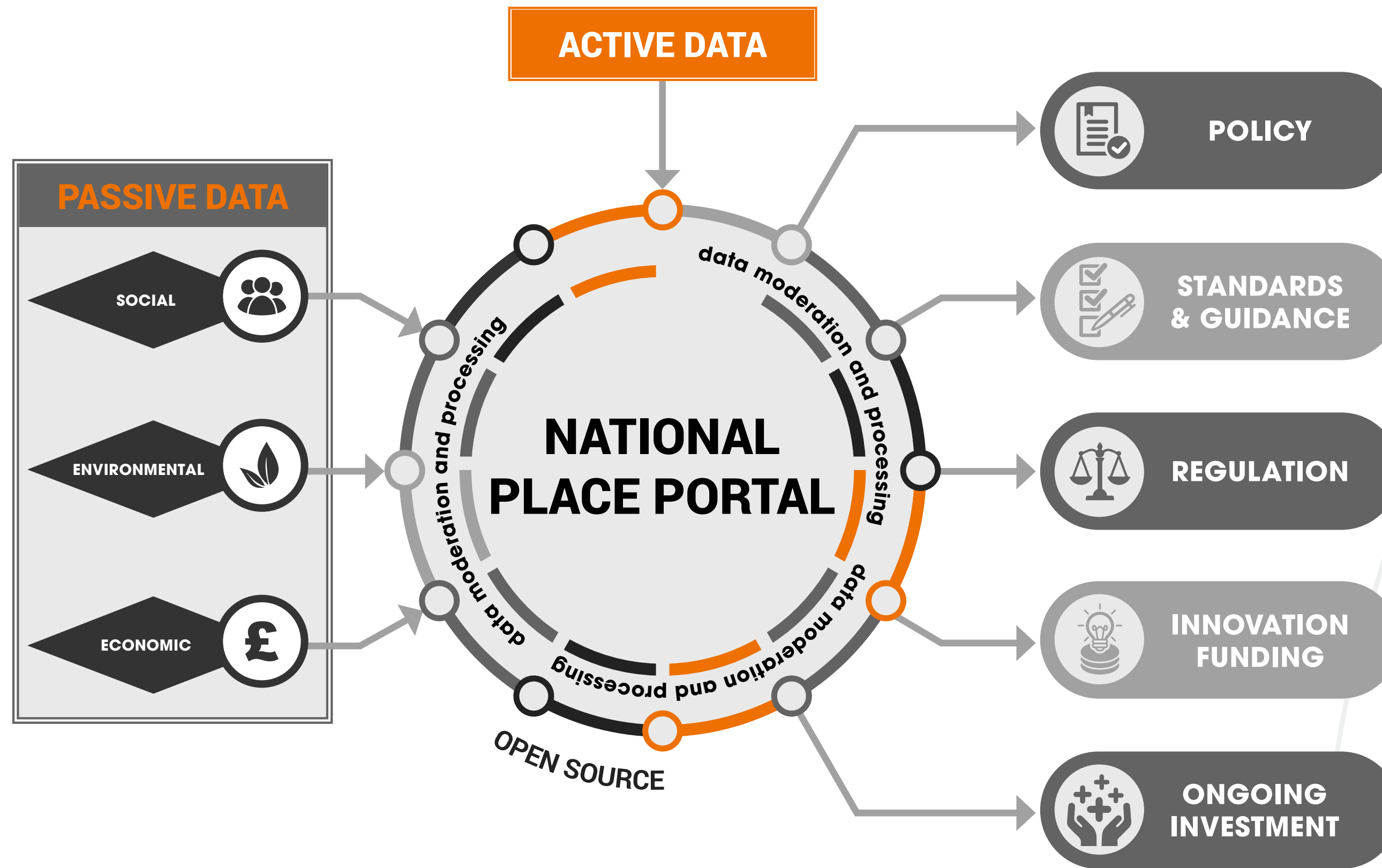
By utilising digital maps as a communication and information management tool throughout the planning process, evidence-based decisions can be made about what should be built and the impacts of such projects. It is all about digital maps creating a means of amplifying the human voice through data and using data to fuel a shared vision (Stantec, 2019).

It is important to remember the reason for transitioning to digital planning, as reiterated by many at the fore of leading changes in practice: “Ultimately the fundamental question is not how do we make civic life more efficient with tech, but rather how can we use tech to make civic life more meaningful?” (Connected Places Catapult, 2020).

Our vision is that this is enabled and supported by a “National Place Portal” * incorporating geographic information of place and environmental, social and economic datasets. An agreed format is needed for a spatial digital infrastructure which offers a transparent and robust foundation for evidence-based decision making. This can be done through the careful and critical collation of passive and active data sets. This open-source, moderated portal would provide a consistent mapping framework and structured and systemic evidence base to inform levelling up. The evidence base within this portal should feed into decision making at the national level about land use and inform **policy making, regulation, investment into innovation and practice, and the development of standards and guidance.**



National Place Portal



We need to make progress now, and recognise that this portal will evolve, rather than being perfect from the outset. One of our research advisory group members made this point during an interview:

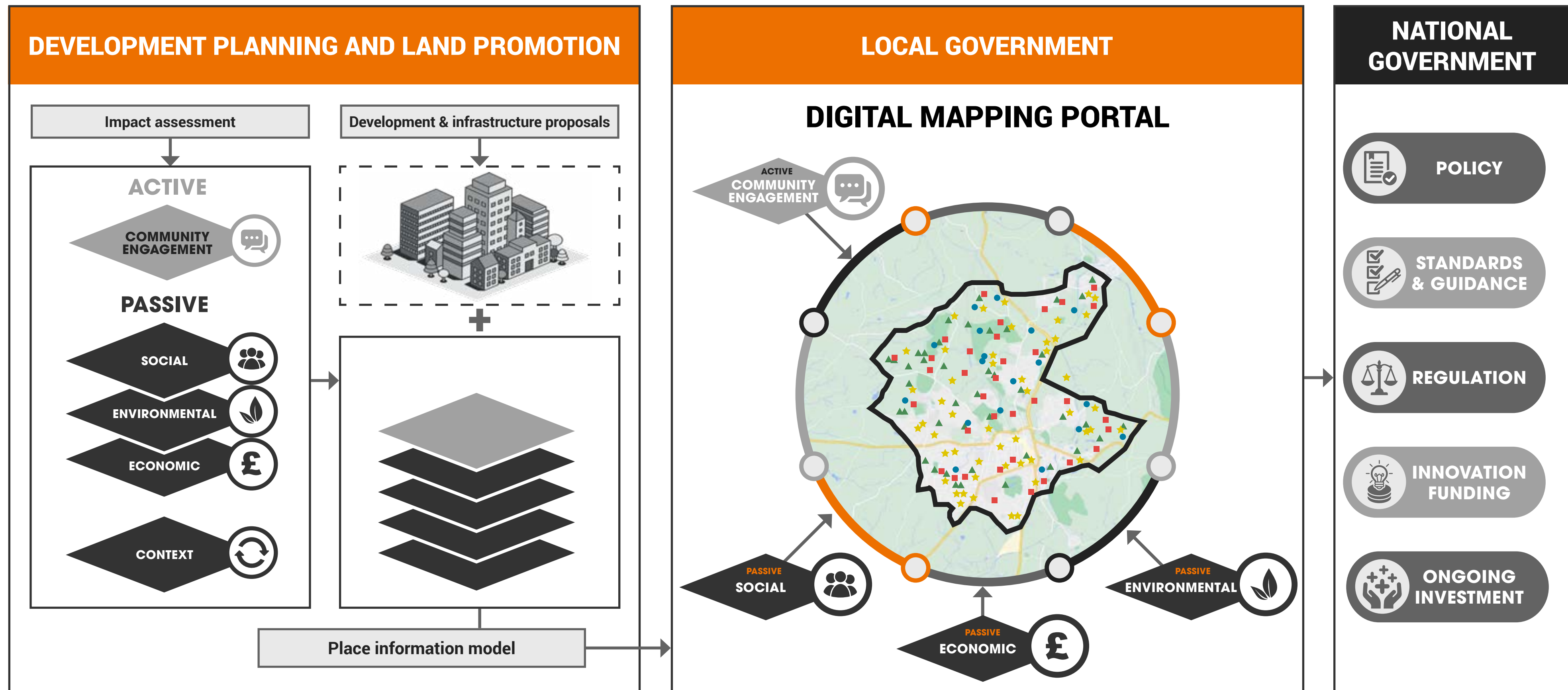
“ You can have all the will in the world, and you can have all the programmers in the world, but if you don’t actually have data on the right things, you’ve got a problem, so I hope we’ll see more awareness of data gaps and more focus on filling those in”. The need for data, not matter how imperfect is growing urgent as Powell Smith observes: “I think within government there can be often too much anxiety about the quality...I’d rather have lower quality stuff with appropriate caveats, then have something that doesn’t exist, but is perfect in theory.”

Anna Powell-Smith Pg 24, 2021



We need to accelerate progress now to continue towards this vision

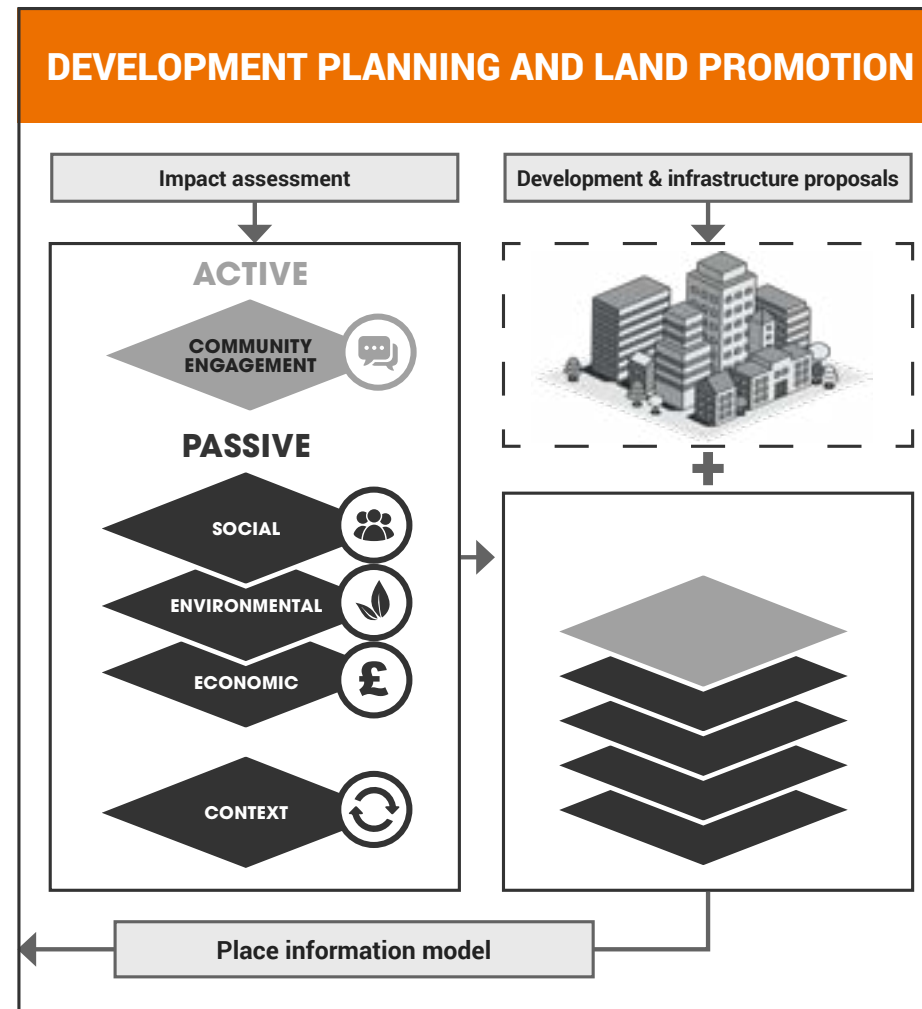
We recognise that to a degree this has started, but progress needs to accelerate rapidly to deliver this vision. The graphic below sets out a more detailed summary of how stakeholders at the local level can play a key part in delivering digital data-led planning. The alternative to one national digital mapping portal is separate local data portals which link to and use national environmental, social, and economic data. For example, passive data portals have been developed for the Sub National Transport Bodies and these share many common datasets. There are other great examples of progress towards the vision happening in research and practice, which we have highlighted below. Developers and land promoters can lead this and deliver open, digital data-led planning on projects to ensure informed decisions and sustainable outcomes.





What can we do now?

Developers, land promoters and local government can and should deliver data-led digital planning using passive and active data now.

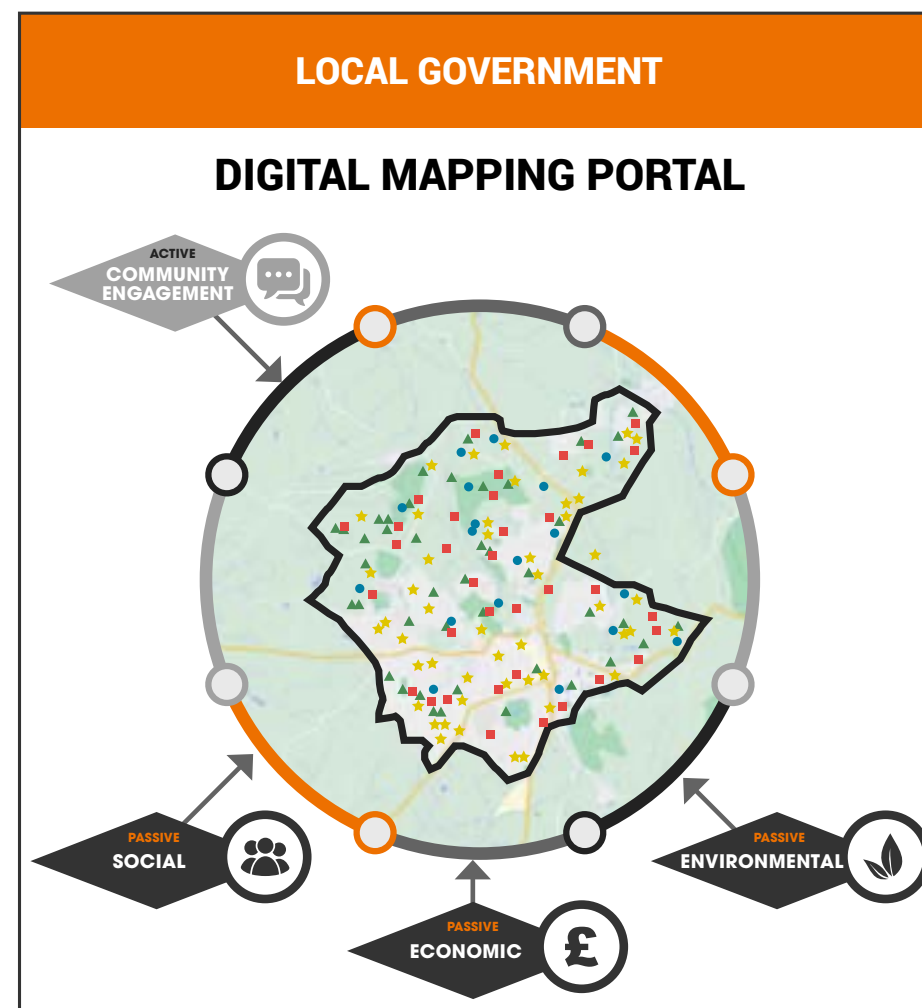


Developers and land promoters

can implement digital data-led decision making based on high quality passive and active datamapping on projects, starting by undertaking local needs and context analysis based on social, environmental and economic datasets. Digital maps can be produced to aide analysis and communication. Early digital and in-person engagement can be undertaken and feed into development proposals to enable informed decision making, so that better strategic land development projects are delivered with better community, climate change and commercial outcomes.

Bristol City Council (BCC) urban regeneration projects;

front loading the planning process and co-designing with communities. BCC is building in early baseline data collection and analysis on public health. This is being achieved by an academic-public partnership through the pioneering work of the TRUUD research project (Tackling the Root causes Upstream of Unhealthy Urban Development). The project will blend in-person and digital engagement and the team are running co-design workshops with local communities.



Local government

working with industry stakeholders, can continue to create and develop digital data and mapping portals, creating local shared visions, and to facilitate the Development Plan and local planning processes.

Further work will be needed by local authorities, developers and land promoters to work through industry bodies to agree:

- A format for bottom-up passive digital mapping to be prepared as a basis for plan development and alongside site planning promotions.
- A format for active data based engagement to be adopted as part of local planning and site promotion processes.

Greater Manchester Combined Authority (GMCA) geographical data platform and public portal:

making data accessible, available and consistent GMCA have developed a public portal which visualises spatial data on themed maps, including physical infrastructure, planning, housing, environmental, social, economic and demographic data.



What's needed to enable quicker, deeper progress and data-led decision making on social, environmental and economic value?



- **POLICY** is needed to ensure the planning system becomes a toolbox for achieving better places. The updated Levelling Up Bill' sets a clear direction of travel for the delivery of digital data-led planning.
- **STANDARDS AND GUIDANCE** are needed to provide a standardised format for digital maps, engagement and planning consultations. The industry needs to agree the key datasets and methods which should be used to bring together real time data on social, environmental, and economic value to inform decision making about land. This will need to set out data management considerations and practices relating to privacy and confidentiality.

Scottish Land Commission: unpacking how land value is recorded and reported.

SLC developed a framework for identifying full economic benefits of reusing vacant and derelict land, with wellbeing as the foundation stone of a thriving economy.

Community Consultation for Quality of Life (CCQOL): exploring the role community input has in digital planning.

This is a collaborative UK-wide research project developing new methods for engagement with communities on the future of their place. This project will develop a code of conduct for digital and face to face planning consultations.

- **REGULATION** will be needed from DLUHC to ensure quick adoption of practices across the industry and to push those who are not leading the way.
- **INNOVATION FUNDING** is needed to play a crucial role in stimulating the implementation of new and interdisciplinary collaborations, methods and processes.

DLUHC PropTech Funding: funding innovation for new partnerships and practices in digital.

DLUHC have funded two rounds of innovation projects "supporting the widespread adoption of digital citizen engagement tools and services within the planning process". Stantec are working on one of the awarded projects. With Harlow & Gilston Garden Town, the Quality-of-Life Foundation and Commonplace to deliver digital engagement, outreach and mapping of social value and quality of life baseline data across the Garden Town.

- **ONGOING INVESTMENT** is needed so that local government can develop, implement and improve digital mapping infrastructure at the local level and facilitate collaboration through open-source data portals.



Open, digital data-led decision making based on passive and active environmental, social and economic data is in the interests of all industry stakeholders

A whole-systems approach to infrastructure, real estate and built environment projects will deliver better long term revenue returns. Investors and other stakeholders, including government, are increasingly requiring the demonstration of better value, and of longer term environmental, social and governance outcomes.

Previous delivery models and methods have been demonstrated to lead to dilution of value for local people and communities, and investment has been targeted towards infrastructure that arguably locks in higher carbon outcomes.

£700M out of £900M allocated by April 2020 of the 'Housing Infrastructure Fund' had been channelled into roads." Is this compatible with our social and environmental goals and targets?

There is finite investment available for community infrastructure and building. Future reforms as part of the Levelling-up and Regeneration Bill must re-address where and how money is invested. For example, local infrastructure delivery strategies need to be developed inclusively with communities and using up-to-date value-based evidence to decide where investment should be spent.

Better up-front research on local areas, and more data and evidence on the social and environmental context, will lead to local government, promoters and developers making more informed investment decisions. Ultimately, this will provide the evidence to channel investment where it is most needed and create long-term environmental, social and economic value for stakeholders. Better-defined problems can mean more informed decisions, leading to better designed solutions.



SECTION 6

CASE STUDIES

Based on the research undertaken through desk research, advisory group feedback and expert interviews we have identified and set out six case studies of best practice that our recommendations can be brought to life through.

These cases differ in the area of the digital planning transition work they focus on, but all are associated with achieving better outcomes on land development projects through more informed decision making.





CASE STUDY

Greater Manchester:

Making data accessible, available and consistent

GMCA are ahead of the game with their data platform, already having addressed the challenges of agreeing standards across disciplines and regions. They see the potential of building on this going forwards.

“ We’ve got something there that we can just keep building on. And I think I’d like to see something where we start to bring together more information and make it more consistent. There’s an opportunity to expand that nationally. ”

Christopher Pope, GMCA 2021

CASE SUMMARY:

The Greater Manchester Combined Authority recognised the need for departments to access GIS embedded data to ensure greater efficiencies when working together, to reduce repeating data sourcing work, and to create a consistent platform to encourage more use of data. This resulted in the creation of a now public portal which visualises spatial data on themed maps, including physical infrastructure, planning, housing, environmental, social, economic and demographic data.

DECISION MAKING FOR BETTER PLACES:

The data platform has continued to grow as the benefits of its use are demonstrated. It has been used as a way of sharing data, making it accessible and available, and then developed further into an interactive platform that has been used directly in gathering new information through consultations. This has demonstrated early use of a platform to bring together active and passive data in one place.

CHANGES TO PRACTICES:

The platform and data available has been driving more data-informed decision making, whilst changing standard practices to draw more on data. But what has had most impact is the outcome of different departments being able to work together more smoothly, through a shared platform. By sharing more data, facilitated by a central digital team, departments have a clearer view of what happens (e.g. planned projects, policies, data recording) elsewhere.

OUTCOMES

- Approaching the data from a systems perspective created a public portal that brought many stakeholders together.
- Demonstrated that the interpersonal work around data brings as much benefit as the data outputs.
- Supporting both cross boundary and department working, achieving interdisciplinary collaboration.

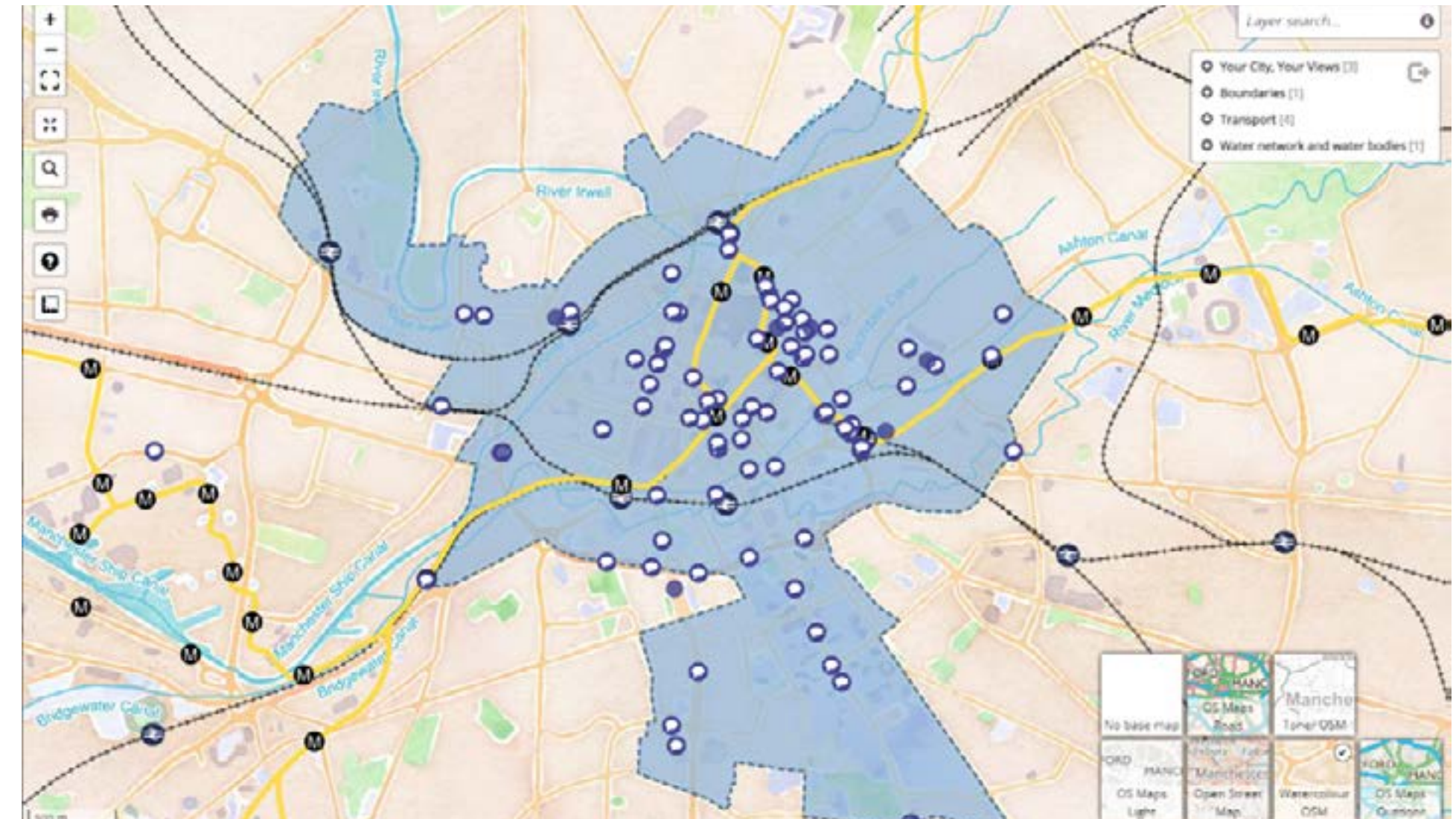


Figure 1 Source: GMCA MappingGM tool. This map shows how the platform was used to gather community feedback on a transport scheme

Where to look for further information: <https://mappinggm.org.uk/about/>

Information provided by Christopher Pope GMCA and David Hodcroft GMCA



CASE STUDY

Scottish Land Commission: Unpacking how land value is recorded and reported

How the value of land is currently estimated and reported is problematic, especially for places with a less obvious commercial or financial value.

“ Looking at land value capture, I think that’s often one of these really ambitious things... sometimes people oversimplify it.”
David Stewart, Scottish Land Commission 2021

CASE SUMMARY:

The Scottish Land Commission was created in response to the emerging needs for both the public and private sector to understand land management practices in new ways that could create greater benefits. Specifically, they set out to undertake robust research that can then influence practice and policy, on everything from unlocking new commercial value of land or prioritising wellbeing benefits. This research focused on vacant and derelict land, producing a framework for identifying the full benefits of reuse of land.

DECISION MAKING FOR BETTER PLACES:

The Community Impact Tool incorporates a survey and scoring system to better factor in social data to business cases and decision making for vacant and derelict land. By re-examining how land value is recorded and reported, this will change the input data within digital planning. This impacts how frameworks behind possible data management will be structured, and influences the Scottish Digital Strategy.

CHANGES TO PRACTICES:

There is significant appetite to understand inherent value of land when the standard commercial and financial models do not create a clear business opportunity. By changing how potential value of land is communicated right from the beginning, very early decision making can be better evidence-based.

OUTCOMES

- Qualitative tool to factor in community wellbeing which will make for a stronger commercial case.
- Evidenced better land use decisions about delivering in less commercially desirable areas.
- Confirmed the benefits of public sector taking a bigger role in leading early, strategic land decision making, particularly in less commercially viable areas.

Where to look for further information:
<https://www.landcommission.gov.scot/>

SCOTTISH LAND COMMISSION
COIMISEAN FEARAINN NA H-ALBA

Vacant & Derelict Land – Community Impact Tool

What is it

This tool is made up of a survey with a scoring system that has been designed to help understand and collect evidence of how a vacant or derelict site makes communities feel. It is intended to help gauge and measure how sites impact community wellbeing and neighbourhoods.

It is **qualitative**, capturing the real lived experience of people living near neglected land or buildings. This survey tool can be used with other tools such as the **Place Standard** or the **Town Centre toolkit**.

The results

Now add up the scores for each question to get an understanding of the impact of the site on the community.

TOTAL SCORE		
0-8	9-16	17-24
LOW OR NO IMPACT	MODERATE – STRONG IMPACT	HIGH – VERY HIGH IMPACT
The site has some or no impact on place and community perception or feelings.	The site has negative impacts on some but not in all areas.	This site has multiple negative impacts on the community. The condition of the site significantly affects access, health, wellbeing and how people feel or behave.

Figure 2 Source: Scottish Land Commission Vacant and Derelict Land - Community Impact Tool. Demonstrating need to understand negative impact of not regenerating or developing



CASE STUDY

HACT: developing value management digital tools for the social housing sector

CASE SUMMARY:

HACT is the social housing sector charity. HACT are driving innovative practices for greater value delivery. They have become a common name across the wider built environment sector since they openly published the Social Value Bank (along with Simetrica) – a set of metrics relevant to social housing outcomes that became a foundation for many social value measurements. They are now in Stage 2 of a 3-part ‘Social Value Roadmap’ to further the practice of social value in housing.

CHANGES TO PRACTICES:

HACT seek to drive value for residents and communities through insight-led products and services. Their new digital offering builds on previous tools that focus on the community, to understand baselines, inputs and measure impact. The approaches are already data-enabled, data-led and community focused, so the upgrade in digital application and outputs available has potential to keep social housing at the fore of good social value practice.

DECISION MAKING FOR BETTER PLACES:

They are upgrading their series of digital tools which offer new ways to measure, record, report, plan for and map outcomes of design work. These tools are more focused on the housing sector than the widely used social value bank. The tools combine passive data use (such as in the Community Insight Tool highlighted in Figure 3) for organisations to strategically plan their work, alongside methods for collecting active data through resident surveys used to measure the social impact of community investment (UK Social Value Bank). Most relevant to this research is the Community Insight Tool, which is ‘a lightweight community focused Geographical Information System (GIS) System’ ‘providing instant access to key, up-to-date social data via a web-based service. Applications include community profiles for neighbourhoods, identification of ‘hostpots’ where need is acute, and provision of real-world data to feed into social impact measurement and assessment tools. Drawbacks include an annual subscription fee for use, inclusion of national data only, and inability to store any asset data in the system. The tool is therefore more suited to relatively simple assessments, and community-focused housing-related projects or studies, with the tool not being ‘a substitute for an in-house stock or asset management system’.

OUTCOMES

- Strategic partners signing up to influence the next iteration of HACT’s work have fallen outside the typical social housing associations, exemplifying industry demand to get ahead of the curve.
- There has been such an appetite for social value data and consistent metric methods, highlighting the need for a broader focus in the built environment and infrastructure industry for similar tools and metrics, and leaders to develop this further.
- Having proved the robustness and utility of a first Social Value Bank of metrics, focused on measuring impact, there is a welcomed shift by HACT’s key partner Simetrica to focus earlier in projects and in business cases to influence early decision making, with the publication of the ‘Green Book Supplementary Guidance on Wellbeing for Appraisal’ last year.

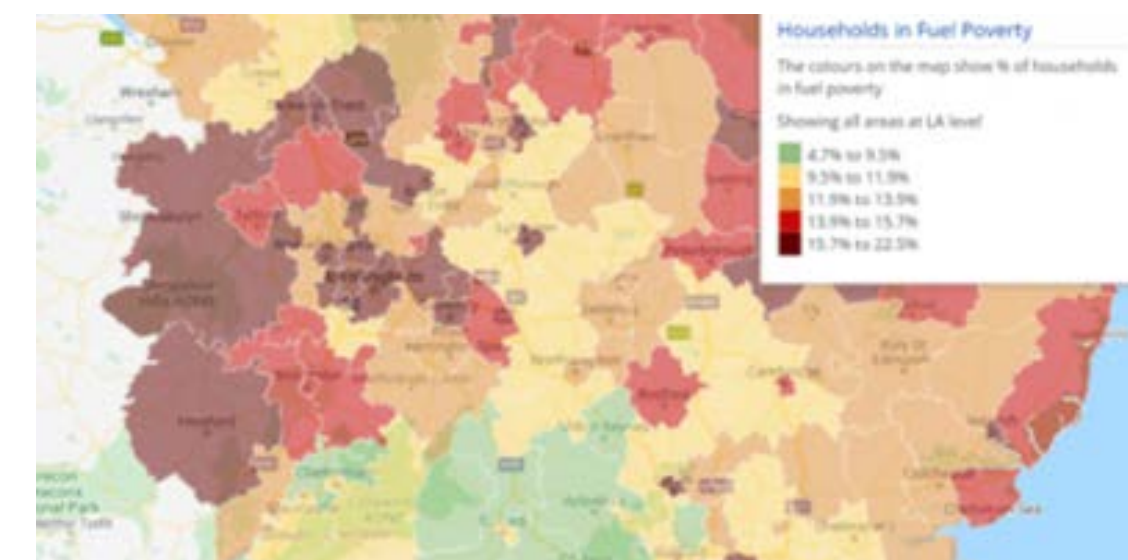


Figure 3 Source: HACT Community Insight tool utilising Oxford Consultants for Social Inclusion’s (OCSI) public data: demonstrating fuel poverty score

Where to look for further information:

<https://hact.org.uk/tools-and-services/social-value-services/>

Information provided by James Williams, HACT 2021



CASE STUDY

DLUHC: a focus on the future of PropTech

In the fast evolving PropTech space, many organisations are responding as they see it evolve and progress, with DLUHC stimulating PropTech projects through innovation funding.

“What started as initially a three month role to just spend a few quick months speaking to a bunch of people across the PropTech ecosystem, understanding what was going well, what isn't going well, what some of the barriers were and how central government could help, has expanded.”

Jessica Williamson, DLUHC 2021

CASE SUMMARY:

DLUHC (previously as MHCLG) identified a need to play a central role to foster the maturing PropTech/ PlanTech field. Initially this was achieved through DLUHC appointing someone to build a network and research the current actors in the field, then evolved into strategic workstreams with associated funding opportunities to unlock the benefits of PropTech.

DECISION MAKING FOR BETTER PLACES:

DLUHC identified that it was primarily private organisations leading the way in developing new planning digital technology, with the needs of local government not necessarily being directly met. As such, funding has been made available to meet this gap and to encourage collaboration between the public sector and the private sector, including the pilot studies on digital community engagement. This fund specifically aimed to make planning more “accessible”¹ (successfully funded planning authorities listed to the right).

CHANGES TO PRACTICES:

DLUHC have funded two rounds of innovation projects “supporting the widespread adoption of digital citizen engagement tools and services within the planning process”. This has stimulated public sector-led projects which will enable DLUHC to “better understand the barriers to be overcome” to allow councils to adopt tools at scale.² Harlow & Gilston Garden Town are one of the successful projects from Round 2 of the funding. Stantec are working with the HGGT team and five local councils, the Quality-of-Life Foundation and Commonplace to deliver digital engagement, outreach and mapping of social value and quality of life baseline data across the Garden Town.

OUTCOMES

- Innovation funding is creating new partnerships between public and private sector.
- Value in combining new agile technology companies with experience of longstanding planning and property organisations.
- DLUHC is working closely with planning authorities across the country to establish best practice and identify where further digital guidance and innovations are needed. Pilot project delivery and coordination creates opportunity to review and develop standards in practice.

Where to look for further information: <https://www.localdigital.gov.uk/fund/prop-tech-engagement-fund/>



Figure 4 Source: Supporting the widespread adoption of digital citizen engagement tools and services within the planning process (<https://www.localdigital.gov.uk/>)

A breakdown of the local planning authorities that have been allocated funding from Round 1 and the amount they have received:

Dacorum Borough Council - £100,000	London Borough of Wandsworth - £30,000
Chesterfield Borough Council - £100,000	Dorset Council - £95,000
Cotswold District Council - £53,193	London Borough of Barking and Dagenham - £100,000
Southampton City Council - £100,000	Watford Borough Council - £99,975
Greater Cambridge - £98,250	Bolsover District Council - £100,000
Stockport Council - £90,000	North Lincolnshire Council - £100,000
London Borough of Hounslow - £100,000	

¹ Press release for more information: <https://www.gov.uk/government/news/local-areas-to-trial-new-digital-initiatives-to-make-planning-process-more-accessible>

² PropTech Engagement Fund - [Round 2](#) | Local Digital



CASE STUDY

Bristol City Council:

an upstream focus on health in urban development and co-designing with communities

CASE SUMMARY:

The Bristol City Council regeneration team have been delivering and evolving progressive approaches to ensure sustainable, community focused urban regeneration projects are delivered in Bristol. BCC is building in early baseline data collection and analysis on public health, achieved by partnering with the TRUUD³ research project (Tackling the Root causes Upstream of Unhealthy Urban Development), which is an academic-public partnership focusing on major mixed-use developments in Bristol. A researcher is embedded in the urban regeneration team. BCC's 'Open Data Bristol' open data portal provides data about the city to "enable people and organisations to use and benefit from data and technology".

The team have focused on the overarching principles of design thinking to shape deep community engagement with expectation management (through the use of statements of community influence), and have successfully brought together innovative use of data science and digital technologies.

DECISION MAKING FOR BETTER PLACES:

The Frome Gateway regeneration project team are creating an open approach to information management. As for many projects, the Covid-19 context pushed engagement online for previous projects. Although this worked well, the team responded to feedback that this did not provide the full in-depth engagement and relationship building needed for such extensive regeneration work achieved through face-to-face engagement. Open principles are at the heart of their engagement processes. In the longer term, the regeneration team aspire to use baseline data on public health analysis to provide a robust framework to evaluate how the project has impacted the area and provided value in ways which are often not measured.

CHANGES TO PRACTICES:

The regeneration team are showing what is possible by bringing together leading evaluation research, carefully thought through expectation management, open engagement and the use of digitally enabled working to shape a holistic view of urban land development that centres people in the process.

OUTCOMES

- Structured expectation management of what can be influenced by community to create constructive consultations, building trust through transparency.
- Using a combined approach of digital and in-person engagement to deliver inclusive approaches.
- Early indications of the advantage of bringing together active and passive data in the short and long term, making this an exemplary project to follow through the development process.

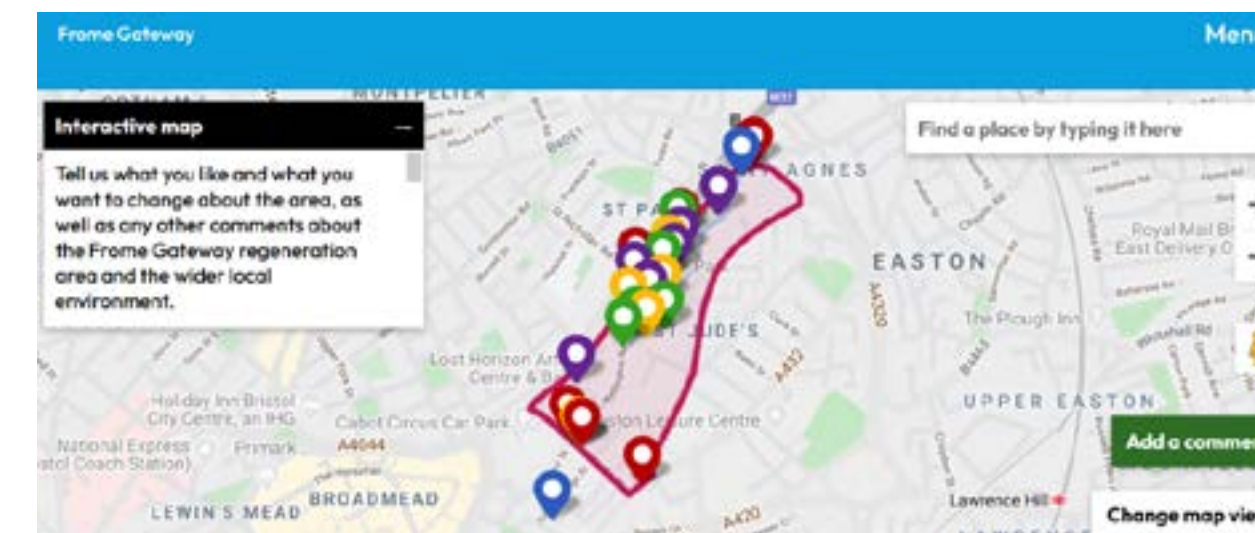


Figure 5 Source: Frome Gateway website, interactive map that is open to comments <https://www.fromegateway.co.uk/index.php?contentid=13>

Where to look for further information: <https://www.fromegateway.co.uk/>

Open data Bristol: [About Open Data Bristol – Open Data Bristol](#)

³ TRUUD aims to "to work with decision makers and communities to prioritise health in urban decision making processes." <https://truud.ac.uk/>



CASE STUDY

Community Consultation for Quality of Life:

Collaborative, UK-wide research project exploring the role community input has in digital planning

CASE SUMMARY:

Community Consultation for Quality of Life is an Arts and Humanities Research Council funded project led by the University of Reading in collaboration with the Quality of Life Foundation and the digital consultation platform Commonplace. Its aim is to develop a code of conduct for digital and face to face planning consultations through a series of exploratory consultations in the varied planning contexts of Reading, Cardiff, Edinburgh and Belfast. An outcome will be a format for making quality of life maps that are representative of the demography of each community. These 'active data' maps can be combined with 'passive data' and topography maps as set out in figure 6 to deliver an evidence based, spatialised and increasingly real time, picture of social value in an area.

DECISION MAKING FOR BETTER PLACES:

When these social value maps are overlaid onto maps of environmental value and economic value, they will offer a rich opportunity for holistic decision making which will develop in sophistication through use. Social value maps made with communities have potential as a tool of democracy as they can be used for participatory budgeting and voting on planning decisions. The maps will also provide a valuable resource for communities to understand what is happening in their places.

CHANGES TO PRACTICES:

The aim is to make planning more inclusive, transparent and evidence based. This would be done through the development of social value maps that are available on an ongoing basis as a means for collecting data about what communities value in their area. These maps can be used to test ideas about planning proposals with the public across the delivery process and to collect post occupancy evaluation data about the impact of projects in use. Ultimately these maps could be used for other democratic purposes such as participatory budgeting, local assemblies and other decision making frameworks. They will also provide an important repository of information for communities on which to base their decision.

OUTCOMES

- Public Participation in Planning Report <https://housingevidence.ac.uk/publications/public-participation-in-planning-in-the-uk-a-review-of-the-literature/>
- A Code of Conduct for inclusive digital and face to face participatory planning.
- Quality of Life maps of Reading, Cardiff, Edinburgh and Belfast available through Commonplace.
- National reports on public participation in all four nations, to be published in 2023.
- A format for co-creating active social value maps with communities to be delivered as a service through the Quality of Life Foundation.



Where to look for further information: <https://ccqol.org/>



SECTION 7

ACKNOWLEDGEMENTS

Report information

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BETTER PLACES

This report is an outcome of the Better Places research project, an Innovate UK Knowledge Transfer Partnership between Stantec and the University of Reading and provides a distillation of more lengthy research review of the area published elsewhere.

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STAKEHOLDER ADVISORY GROUP

We would also like to thank our Stakeholder Advisory Group, who have shaped our research and without whose contributions this would not have been possible. Key organisations who we have collaborated with since the start of this research in September 2019 are highlighted opposite.

This research was structured around extensive desk research, a series of workshops with an advisory stakeholder group, 8 formal academic interviews with industry experts in this area, and continuous feedback and sense-checking through ongoing engagement between academia, industry, and policy to ensure the outputs remain timely and relevant. The views within this report are the views of our research team, and we acknowledge that any errors are our own.





SECTION 6

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