



THE ASSOCIATION  
FOR **GEOGRAPHIC**  
**INFORMATION**

# Housing & Geospatial:

## *A Crisis or Opportunity?*



# About the AGI

The Association for Geographic Information (AGI) is the UK's geospatial membership organisation; leading, connecting and developing a community of members who use and benefit from geographic information.

An independent and impartial organisation representing the UK geospatial sector, the AGI works with members and the wider community, to deliver the highest quality of education and provide a lead for best practice across the industry.

***Our mission is to nurture, create and support a thriving UK Geospatial Community, actively supporting a sustainable future and we aim to achieve this through the three pillars that govern our activities and intentions;***

- nurture and connect active GI communities
- support career and skills development for GI Professionals
- provide thought leadership to inspire future generations

Established in 1989, members of the AGI enjoy unrivalled networking opportunities, a framework to learn new skills and the support to progress professional development. There are many ways to get involved and different levels of engagement;

- **Individual Network Member;** free membership for anyone
- **Individual Professional Member;** paid membership for individuals providing additional career, networking and business development benefits
- **Organisational Associate Member;** membership for organisations that includes professional membership for all employees and promotional benefits
- **Organisational Partner Member;** premium membership for organisations that includes thought leadership, professional membership, promotions, sponsorship and additional benefits





# Executive Summary

An independent and impartial organisation, representing the UK geospatial sector, the Association for Geographic Information works with members and the wider community alongside government policy makers, it supports professional development, and provides a lead for best practice across the industry.

As part of its remit the Association for Geographic Information convened a group of invited participants including stakeholders from government, industry, registered housing providers, and regulators, to come together to discuss key themes aimed at unlocking opportunities for geospatial technology within the housing community.

This discussion was co-hosted alongside the AGI's annual conference and flagship event GeoCom on Thursday 28 November 2024 and was chaired by Alexandra Notay, Chair of Radix Big Tent Housing Commission, and an Independent Commissioner at the Geospatial Commission.

The mix of attendees generated a lively and vibrant discussion – highlighting immediately the challenge of technical terminology across different professional siloes of expertise when one housing attendee asked for an explanation of what geospatial actually is. The broader discussion that sprang from this highlighted the benefit of these broader convenings and collaboration across disciplines to explore shared solutions to a range of challenges.

During the discussions five key questions were posed:

- What is geospatial and how well is it understood in the wider housing sector?
- What can the geospatial sector bring to the housing community?
- How can a place-based approach support the current, and ongoing needs of the housing sector, and how can this help to improve quality of life for residents?
- How can we breakdown data and knowledge silos and what is the role of technology in operations?
- How do we keep people at the heart of everything we do?

Key outcomes and actions from the discussions included:

- Agreement to revive a working group that connects geospatial and the housing sector.
- Find compelling stories to tell, that highlight the potential for geospatial technology in the housing community and clearly explain what it is and how it could benefit the sector.
- Move away from technical jargon, acronyms and language, that makes geospatial impenetrable.
- Learn from other sectors that are already applying innovation and best practice to improve standards and joined-up thinking



# Roundtable Discussion

Following individual introductions, the proceedings opened with a short description of the role of the Association for Geographic Information; its ambition to bring together stakeholders from a wide range of sectors through the power and potential of geospatial, and its purpose to communicate and engage for the wider adoption and better understanding of data, technology and skills.

The Chair outlined the purpose of the meeting, setting the premise that 'information is a force for good', and challenging those in the room with a series of framing questions;



## What is geospatial?

The question of the day; 'What is geospatial?' After an awkward moment, the answer was offered that geospatial allows for the power of maps or location to unlock additional information or data, and inform decisions, effectively making the connection between place and all other information.

This theme of 'location (or spatial) versus place' was expanded to explore the concept of boundaries, and 'place versus people', where administrative or other types of borders do not match either each other or the behaviour of those who occupy them. Thus, giving geography (location) the role of aggregator or enabler.

It was suggested that the greatest power of geospatial, and where it has the biggest potential for impact and improvement, is the ability to 'story tell'; using data and maps to model and translate into understandable and meaningful outputs. This concept was embraced and expanded with terms like 'democratisation' and 'bottom-up participation' used, and the discussion continued with a need for inclusion and diversity, engaging with respondents across housing, utilities and planning, and making geo more active within these areas.

However, later in the discussions, another tumbleweed moment proposed that, as a sector, the term geospatial be dropped. It was compared to knitting in so much as it was unsexy, under-financed and under-resourced. Both geospatial and housing professionals in the room agreed that the concept of 'geospatial' is not well understood and that the professional siloes across the property development sector don't align well to addressing both the skills and data literacy gaps at board, management and operational levels. There was a call for competency-based initiatives to be supported by professional organisations.

## Improving the knowledge base

Participants agreed that the knowledge base across all forms of property, asset and geospatial data, across the housing sector was inconsistent, with silos existing within organisations, often with individuals. It was felt that significant amounts of data or information, was not recorded and, even worse, not capturable, and that decisions on where to build were often based on conceptual, anecdotal and personal feelings, rather than spatial analysis.

Motivation as a driver for improvement had already been touched on during the discussions with the idea that there is currently no 'big stick', or if there is, there is no central force, shared motivation or aligned incentive. Legislative drivers and enablers, such as Net Zero Carbon, the GIS (Geographic Information Systems) for Housing group, and Decent Homes 2, all gained a degree of traction but not sufficient to ultimately succeed in joining up a successful, national approach to impact the management of UK housing.

# Roundtable Discussion

## How can we breakdown data / knowledge silos?

Returning to the 'power of data' it was suggested that geospatial could be used to unlock the potential for more joined-up approaches, intersecting policy areas and innovating process towards data discovery and its rational use, in other words, 'breaking the silos'. An example cited was the Thamesmead development in south-east London which straddles Local Authority boundaries due to its ownership and management thereby being grounded in place not location.

Continuing on the data theme it was suggested that the barriers to geospatial are too high. Barriers such as cost, accessibility, and availability are all standing in the way and creating a situation where 'We don't know the questions we need to answer!'. An alternative view of these barriers, under the header transparency, was offered whereby rather than being seen as a force for good the concepts of risk and fear were flagged with a potential distrust by the public of open data.

A call was made for a Public Sector Geospatial Agreement (PSGA) for Housing. To address the lack of standards within real estate, tackle the issue of interoperability, address the availability of data, and the issues of silos, a PSGA would, it was muted, allow a previous statement to be turned on its head 'We can provide the answers if we know the questions'.

However, as with all good debate there is always an opposite view; in this instance that a PSGA is not the solution. It was suggested that Local Authorities don't know what they have got and what they have already got is too complicated, with multiple, complex systems, disconnected processes, and a history of under resourcing. Agreement on this included the suggestion that we are still having the same conversations we were 30 years' ago, effectively suggesting that this is a behavioural issue not one of policy or interoperability – 'we know what we think we need to know, and at a level that we understand'.

An alternative suggestion was made; sharing of data, potentially via a one stop shop approach, which could eliminate the need for a PSGA approach. However, many players within the housing sector already have open access to UPRNs (Unique Property Reference Numbers) but don't use them. The discussion around data continued with the contention that while no-one philosophically disagrees with the idea of open and or shared data, no one is willing to take responsibility for it. It was suggested, that as consumers of data and information we are intrinsically hooked on maintaining the very best, which is expensive, and no-one, including government, wants to pay for it.





# Roundtable Discussion

## What is the role of technology, and how can this become more accessible?

An example of the ability to unlock additional value through the use of geospatial data and technology was presented with a European funded project to model citizen centric smart cities known as Citiverses. With minimum interoperability, this allows for the sharing of different insights and the setting of new standards.

The work of Professor Fei-Fei Li, known as the Godmother of AI, was also cited, with a Nobel Prize winning project to create digital models of physical environments, at grass roots levels, with citizen engagement which has resulted in a \$1 billion start up business which will attempt to create 'spatial intelligence' in AI by developing humanlike processing of visual data. This concept of social interactions to create visualisations and prompt questions to be asked was reiterated with the 'one map' approach; using geo to identify, locate and visualise, in order to produce interesting, practical and workable stories.

Agreeing that the focus must remain on the outputs supported by geo it was suggested that in order to achieve these, not all data needs to be, or can be, open access and transparent, rather, that all data needs to be stored and processed in a safe and secure computer environment. The example of CReDo, the Climate Resilience Demonstrator, was given, which is changing stories and preventing damaging outcomes by using a complex understanding and utilisation of both commercially and legally sensitive data.

Picking up on an earlier statement that 'everyone's data is horrible', another example was cited where 'horrible' data in the water sector was curated and made usable for one specific use case, providing the skills and framework for roll out across other applications and sectors, including housing.



# Roundtable Discussion

## How do we keep people at the heart of everything we do?

The question, or suggestion, was then made to the panel 'Have we over-complicated the role / impact of geospatial over the years?'; what level should we be communicating at and therefore how should we pitch our position and share our experience, and what is our motivation for doing this?

Once again returning to the idea of location versus place it was agreed that one size would not fit all; actions and services in city centre Birmingham are very different to those in the suburbs of Hastings, and the impact on or role of geospatial to a Chief Executive and a Housing Officer should also differ.



The conversation then returned to data. It was proposed that free data was not the solution; even with free or open data there still remained the issue of lack of knowledge and understanding which, often results in opportunities for external consultancies to profit.

It was therefore suggested that knowledge sharing, in addition to data sharing, offered an on-the-ground solution, but again the problem of 'one size does not fit all' was raised alongside the thorny issue of different motivations.

It was suggested that perhaps data availability isn't the core issue and that the skills to access, and ultimately extract value from, what is available is restricted by a lack of geo capability. Citing the example of job adverts, where a GIS position commands a salary of circa £40,000 while a Software Engineer, potentially with some GIS skills, can extract £80,000 upwards. Running with this thought and moving away from data discussions, the subject of KPI (Key Performance Indicator) reporting frameworks were introduced; rather than focusing on land values we should instead be looking at outcomes in health, education and transport, for example, and using geo data and skills to model and report.

Frontline practitioners within the room were keen to expand on this discussion highlighting the real-world challenges they as organisations and individuals face on daily basis. For them, it is about the individual emergencies and crises residents are battling, and the pressure they are under to mitigate and respond to these. For them, the power of geo is in 'connecting the dots', bringing together the police and NHS to plan, prevent and work across communities, and they need data, and skills to do this.

And finally, the focus should always be about people, their homes, the built environment, how people relate to their community, and how people move around, if we are to create real benefits for social good.



# UK Housing Crisis: An Overview

**The UK Government's flagship plan to build 1.5 million homes in England over the next five years has been called 'unrealistic' and 'impossible to achieve' by local Councils according to the BBC.**

To put in context;

- in the financial year 2023-24 there were 35,676 housing starts on site, and 32,834 housing completions delivered through programmes managed by Homes England.
- 29,067 of housing starts on site in 2023-24 (representing 82 per cent of all starts) were for affordable homes, a decrease of 0.5 per cent on the previous year.
- 24,798, or 71%, of housing completions in 2023-24 were for affordable homes, an increase of 3 per cent on 2022-23.

**If these figures were to be maintained this would equate to around 180,000 starts on site over five years, and 165,000 completions.**

However, this is just one example to enforce the view that the UK housing sector is in crisis. A recently published report, by an independent commission from the think tank Radix Big Tent, provides a wider, more holistic view;

- During the same period, 2023/24, the total number of homes available (housing stock) was 25,396,447 of which 699,126, or 2.75%, are classed as empty.
- The social housing waiting list stood at 1,290,000 with homelessness at 309,000 an increase of 127% on the previous year.
- There were 234,397 new build completions, of which 9,535 were social rent completions, and 19% of housing failed to meet the decent homes standard.





# UK Housing Crisis: Moving Forward

**The Commission urged the Government to recognise that housing IS national infrastructure and is a critical driver of economic prosperity and growth. The report also stresses the importance of recognising housing as a complex ecosystem, integrated policy and implementation, and the need to encompass all professional sectors.**

The report set out 15 recommendations;

- Establish a new Housing Delivery Unit and Independent Statutory Housing Committee
- Create and implement a UK Housing Strategy
- Forge a Cross-Party Accord
- Facilitate the release of public sector land for housing
- Provide specific support for local and combined authorities
- Rethink the role of Homes England so it can act as a master developer
- Streamline existing funding pots and processes
- Recognise the importance of rental tenures and support the broadest range and delivery models
- Recognise the critical role of institutional investment
- Reform the current system of developer contributions with the goal to deliver more affordable housing
- Agree a prompt rent settlement to provide income security and an enlarged affordable housing programme
- Restore a mandatory approach to strategic planning at the sub-regional / city region level
- Establish a new team within MHCLG to provide a more co-ordinated approach to strategic planning
- Commission an independent review of the Metropolitan Green Belt
- Develop a new, bespoke policy to support small and medium sized site.

*“There is no shortage of appetite to tackle this challenge and if some, or all, of these recommendations are adopted then it is possible that we might at last have the holistic framework to deliver meaningful change and progress.”*

**Alex Notay, Chair, RBT Housing Commission  
and Independent Commissioner,  
Geospatial Commission**

