### Green infrastructure and the Health and wellbeing Influences on an Ageing population



www.ghia.org.uk

Understanding the benefits and values of urban green infrastructure to older people and how green infrastructure attributes and interventions can best support healthy ageing in urban areas



Project Details: 1st August 2016 – 31st July 2019 NERC grant reference number NE/N013530/1

Funders: Natural Environment Research Council, the Arts and Humanities Research Council and the Economic and Social Research Council under the Valuing Nature Programme.

For further information, please contact:

Prof Sarah Lindley, Department of Geography, University of Manchester, Email sarah.lindley@manchester.ac.uk



### Co-creating evidence



How can urban green infrastructure be best designed, enhanced, managed and promoted to support its use as part of preventative and restorative therapies, and other health & wellbeing related activities?

**GI Engagement Impact** 

Identifying older people's motivations for engaging with GI health and

Identifying the opportunities and barriers for engagement in GI within diverse groups

**GI Benefits Impact** 

Evidencing how GI influences older people's wellbeing

Demonstrating

opportunities for

wellbeing

interventions and

their relevance to

health and social

care devolution

Developing mixed methodologies to communicate the non-monetary

value of GI

GI Values

**Impact** 

Encouraging more holistic approaches to valuation and its relevance to policy and practice

6 interconnected Work Packages cover multidisciplinary themes

3 cross-cutting evidence strands

Case studies for different types of green & blue spaces around Greater Manchester,

e.g. parks, gardens, rivers & canals









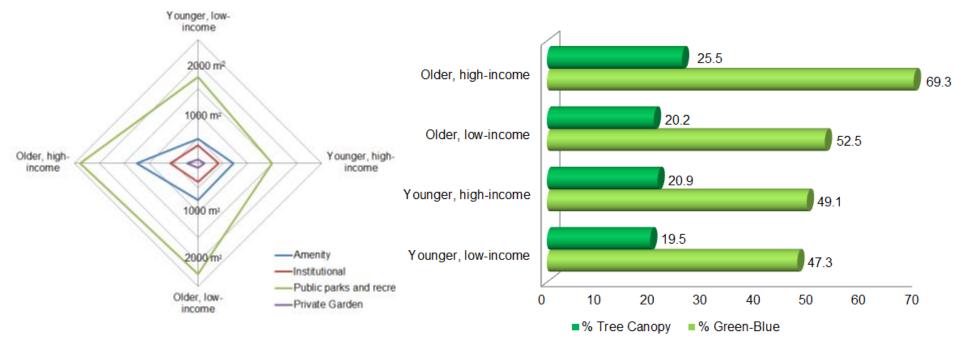






### Who has the most urban green & blue space?

- People on high incomes
- Older people
- Neighbourhoods with older residents on high incomes are the greenest – by far.



Dennis, M, Barlow, D, Cavan, G, Cook, P, Gilchrist, A, Handley, J, James, P, Thompson, J, Tzoulas, K, Wheater, P & Lindley, S 2018, 'Mapping urban green infrastructure: a novel landscape-based approach to incorporating land-use and land-cover in the mapping of human-dominated systems', Land. https://doi.org/10.3390/land7010017





## What are the links between health and green infrastructure for older people?

- Better health in neighbourhoods with more, better quality and closer green and blue spaces.
- Older, high income neighbourhoods
  - Positive associations with many different elements of green infrastructure.
- Older low income neighbourhoods
  - Proximity to local green and blue spaces (within 100m) is the only statistically significant association.
  - Improving the quality of public parks & recreation areas could bring further benefits.







# How do older people themselves value green space for their health and wellbeing?

- Everyone of us has different needs, histories and interests underpinning what gives us a good life
- Wellbeing what people can be and do with their lives.
- Green and blue spaces are valued as places that:
  - Embody personal and social memories.
  - Present opportunities to connect with nature and volunteer with others.
  - Present opportunities for active outdoor activity and adventure.
  - Present opportunities for social relationships, independence and personal growth.









## What can we learn from assessing interventions?

- Even small scale interventions can have an impact for some elements of wellbeing.
- A natural experiment study showed no statistically significant change in older adults' physical activity, or observable wellbeing indicators
  - Small, existing green area, past interventions
  - Differences in perceptions
    - "This is their little island, isn't it?"
- Physical activity not universally relevant to any GI intervention.
- Other presentations in C2 cover
  - Dementia walks as a H&W intervention
  - GI as an intervention for UFP moderation



- Tree and flower planting
- Tree socks
- Artificial string lights



Information board





## Why do we need participatory creative practice?

- Creative practice is a vital companion to other research methods
  - Loneliness and social isolation are challenging topic to be addressed directly
  - Visual expression is especially important for people who speak English as a second language, and with experiences of trauma and exclusion.
  - Deeper understanding of barriers to and opportunities for engagement.

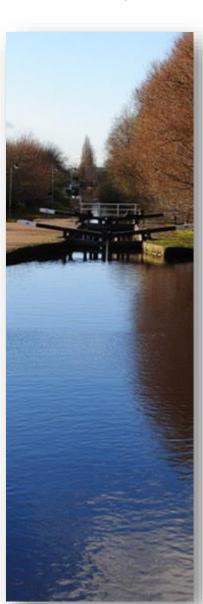






### What motivates people to engage more with urban GI in later life?

- We can't assume that health and wellbeing benefits are the primary motivator, so what does attract older people?
  - Individual factors
    - Emotional & personal connections to particular places.
    - Opportunity for personal achievement
    - Opportunity for variety and change
    - Having time
  - Social factors
    - Opportunity to meet new people
    - Opportunity to share knowledge and skills
    - Availability of a older place-makers and organisations to which different individuals can relate
  - Environmental factors
    - Quality Character of particular places interesting plants or wildlife and particular colours, shapes, scent & movement.
    - Accessibility and facilities







## "You just don't realise how important it is until it's taken away"

Many excellent examples of positive interventions and some bold visions for increasing and enhancing urban green infrastructure in the future.

But there are also losses.

We must also consider the negative impact of losing spaces and 'wild places' valued by and cared for by communities.

This can lead to negative health and wellbeing outcomes unless carefully managed.





### Take-Homes



#### **Tools**

- Online interactive map-based tools \*see Gina Cavan's talk on Tue!
  - Extract
  - Value
  - Explore
- MOHAWk: a validated tool for assessing physical activity (Sedentary, Walking, Vigorous) & two other wellbeing behaviours (Take Notice: awareness of the environment; Connect: social interaction) in urban spaces

Dennis, M, Barlow, D, Cavan, G, Cook, P, Gilchrist, A, Handley, J, James, P, Thompson, J, Tzoulas, K, Wheater, P & Lindley, S 2018, 'Mapping urban green infrastructure: a novel landscape-based approach to incorporating land-use and land-cover in the mapping of human-dominated systems', Land. <a href="https://doi.org/10.3390/land7010017">https://doi.org/10.3390/land7010017</a>

Benton JS, Anderson J, Pulis M, Cotterill S, Hunter RF, French DP. Method for Observing pHysical Activity and Wellbeing (MOHAWk): development and validation of an observation tool to assess physical activity and other wellbeing behaviours in urban spaces. Cities & Health. Under review.

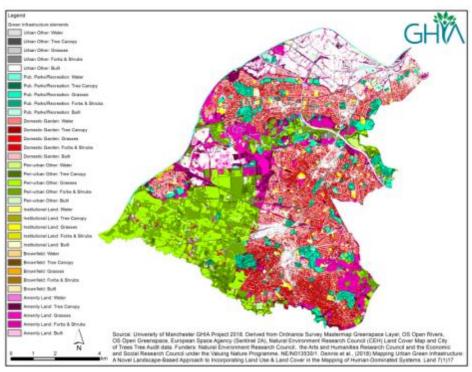
#### **Dissemination Event for practitioners**

→ Jan 9<sup>th</sup> 2020 Whitworth Art Gallery



#### **Methodologies**

- GI mapping methodology
- Non-monetary valuation manual
- Creative practice models
- Handling scale in H&W assessments
- And more....



Sarah.Lindley@manchester.ac.uk www.ghia.org.uk