



Exploring the needs, provision & value of green infrastructure for older people with the GHIA online tools

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www.ghia.org.uk



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MANCHESTER
CITY COUNCIL



Canal &
River Trust



Manchester
City of Trees

GMCVO

MANCHESTER:
A CERTAIN FUTURE

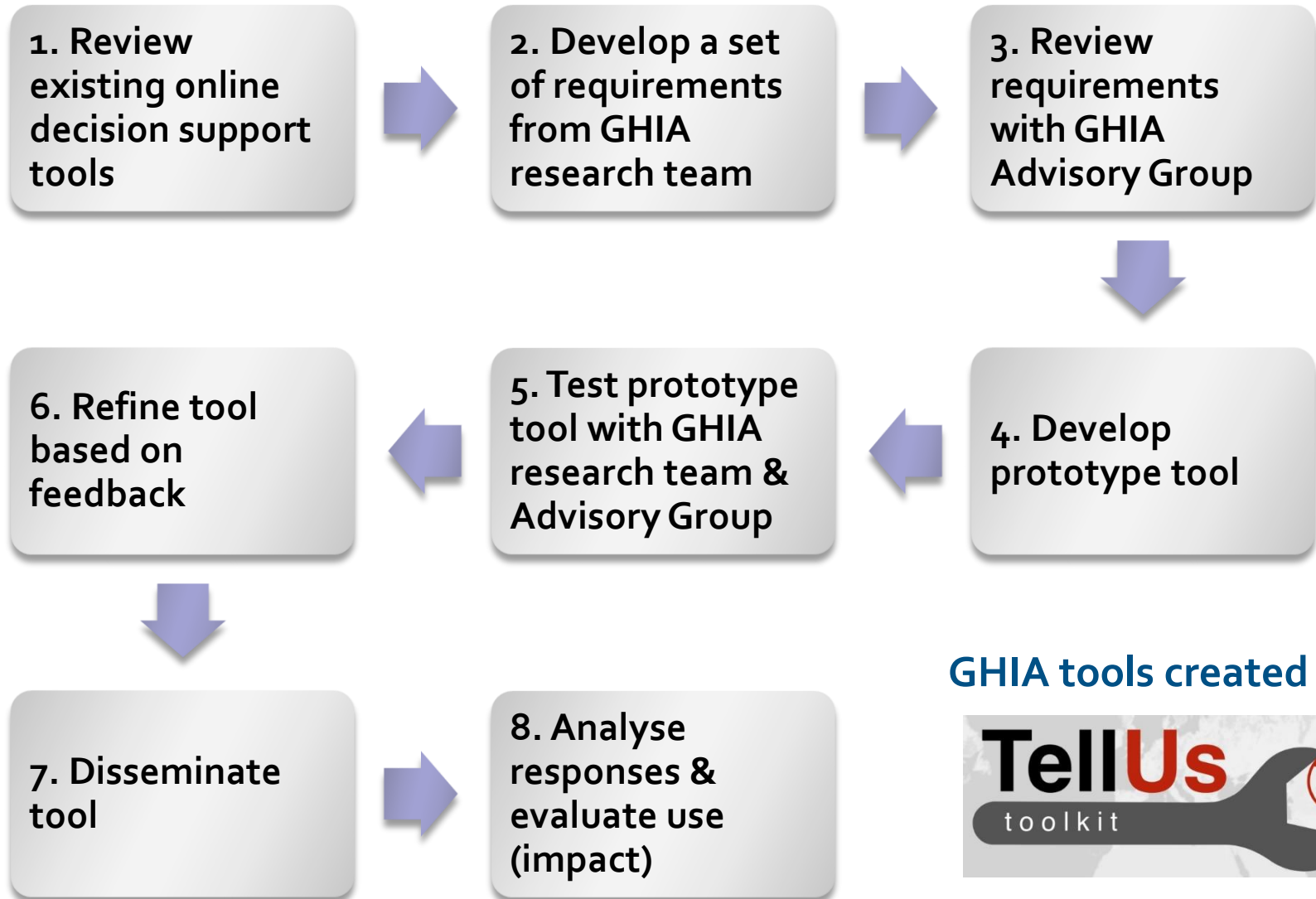
The GHIA project



- ▶ Aim: To better understand the benefits and values of urban GI to older people and how GI attributes and interventions can best support healthy ageing in urban areas
- ▶ Development of web tools to provide access to project results:
 - Representation, mapping and analysis of project data
 - Translating findings into a set of requirements for a web-mapping system
 - Collate the co-researched and produced outputs, and host them via an online tool



GHIA tools – development process



GHIA tools created by:



Three online tools to explore research outputs interactively



Welcome to the GHIA map tools

The Green infrastructure and the Health and wellbeing Influences on an Ageing population (GHIA) project aims to understand the benefits and values of urban green and blue spaces for older people. By green and blue spaces we mean things like parks, gardens, canals and rivers, woodlands, street trees and any other areas of water or vegetation.

Our tools allow you to:

Find out information about the amount of green and blue space in different areas of Greater Manchester.

[THE EXTRACT TOOL »](#)

Contribute views about how green and blue spaces in Greater Manchester influence your health and wellbeing and see what others say.

[THE VALUE TOOL »](#)

Explore health and green space associations in Greater Manchester.
(due shortly).

[THE EXPLORE TOOL »](#)

[LEARN MORE ABOUT GHIA »](#)



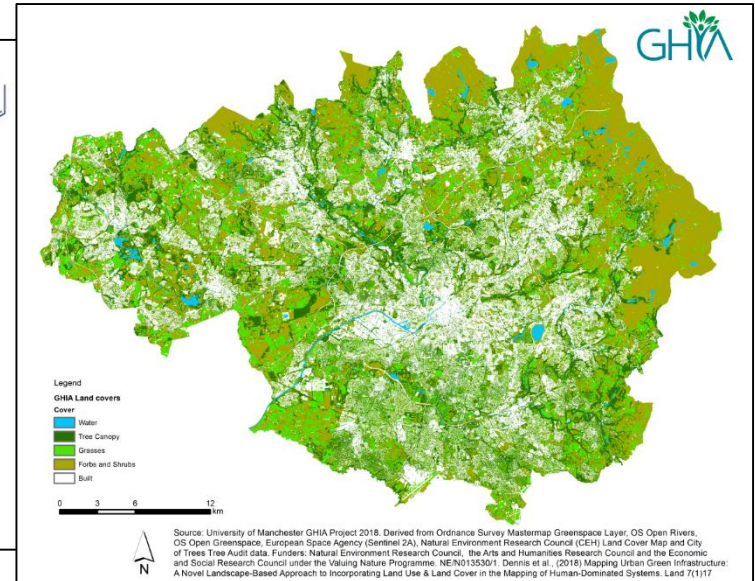


Article

Mapping Urban Green Infrastructure: A Novel Landscape-Based Approach to Incorporating Land Use and Land Cover in the Mapping of Human-Dominated Systems

Matthew Dennis ^{1,*}, David Barlow ², Gina Cavan ³, Penny A. Cook ⁴ , Anna Gilchrist ¹, John Handley ¹, Philip James ⁵ , Jessica Thompson ⁶, Konstantinos Tzoulas ³ , C. Philip Wheeler ³ and Sarah Lindley ¹

Land 2018, 7, 17; doi:10.3390/land7010017



- ▶ **Function:** Users can find information about the amount of green and blue space for their area and compare to GM averages
- ▶ **Audience:** Practitioners, decision-makers, community groups
- ▶ **Example:** A local community group wants to apply for funding to improve green space. They use the tool to get data on green cover in their area and how it compares to the ward and GM average

GHIA Extract tool



Function: Find out information about the amount of green and blue space in different areas in Greater Manchester

Return to Welcome Page

Complete the following three steps to generate a report on green and blue land cover in your area.

Step 1: Choose how you would like to select your study area

POINT POLYGON LSOA WARD

Step 2: Zoom into the map to find your area of interest.

Click on the map to select a point location. Information will be generated with details about the land cover inside a square of 1km size centred on your point.

DIAGRAM DATA TABLE

Step 3: Select how to view the results. Your results will be displayed in comparison to the average land cover for Greater Manchester.

Leaflet | Tiles courtesy of OpenStreetMap Sweden — Map data © OpenStreetMap

GHIA Extract tool



Function: Find out information about the amount of green and blue space in different areas in Greater Manchester

The screenshot shows the GHIA Extract tool interface. On the left, a map displays a selected area (a square with a red border) and a point location (a blue dot). The map is overlaid with a grid. On the right, there are instructions and controls for the tool.

Return to Welcome Page

Physical

Complete the following three steps to generate a report on green and blue land cover in your area.

Step 1: Choose how you would like to select your study area

POINT POLYGON LSOA WARD

Step 2: Zoom into the map to find your area of interest.

Click on the map to select a point location. Information will be generated with details about the land cover inside a square of 1km size centred on your point.

DIAGRAM DATA TABLE

Step 3: Select how to view the results. Your results will be displayed in comparison to the average land cover for Greater Manchester.

Selected Data

Land Cover Type	Value (Relative to Average)
Built	55
Water	0
Grasses	10
Forbs and shrubs	5
Tree canopy	30

GHIA Extract tool



Function: Find out information about the amount of green and blue space in different areas in Greater Manchester

Return to Welcome Page

Complete the following three steps to generate a report on green and blue land cover in your area.

Step 1: Choose how you would like to select your study area

POINT POLYGON LSOA WARD

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Click on the map to select a point location. Information will be generated with details about the land cover inside a square of 1km size centred on your point.

DIAGRAM DATA TABLE

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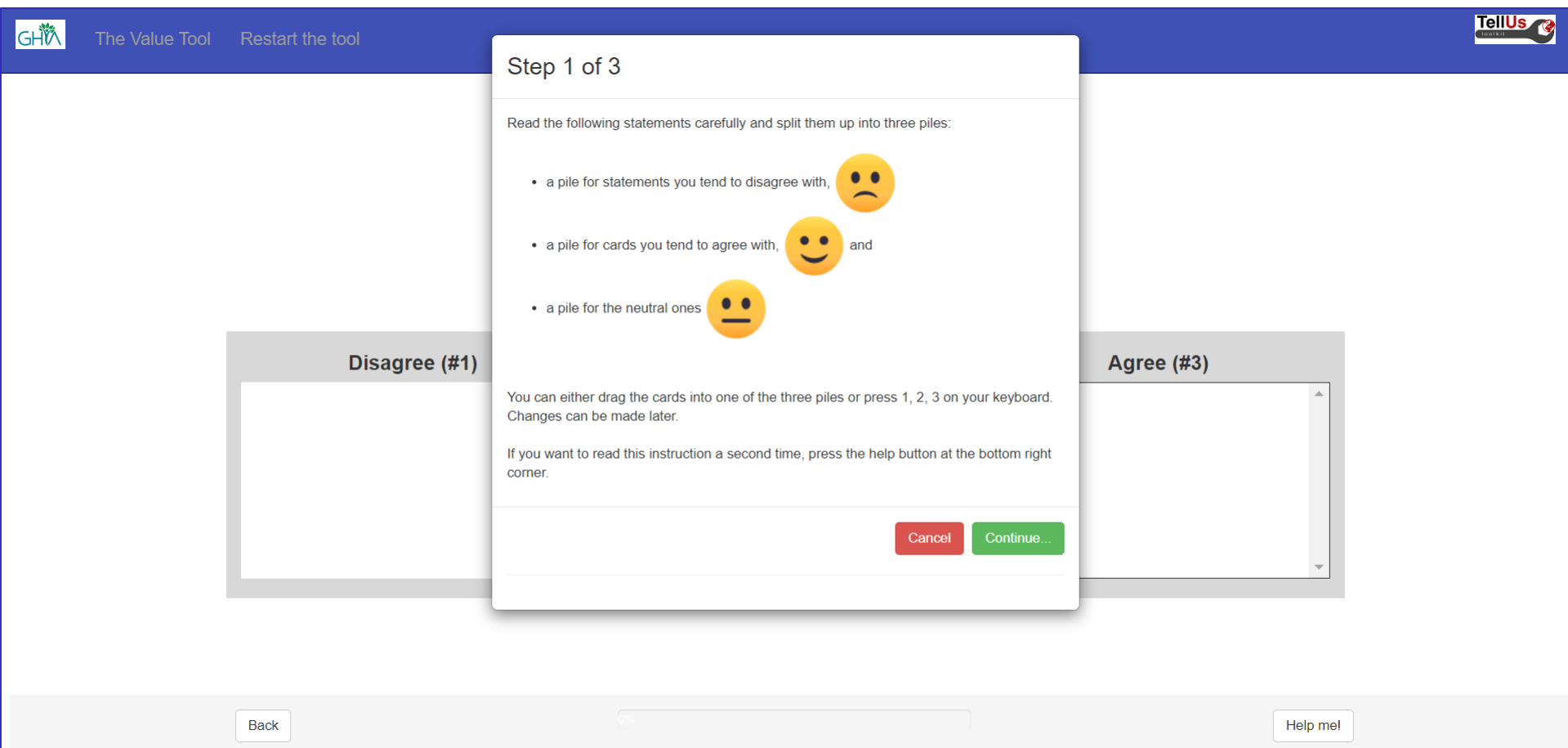
Form	Function	Area%
Built (total)		56.112
Built	Urban Other	29.919
Built	Domestic Gardens	21.321
Built	Public Recreation	0.373
Built	Amenity	1.510
Built	Previously Developed	0.010
Built	Institutional	2.980
Grasses (total)		8.136
Grasses	Urban Other	2.402
Grasses	Domestic Gardens	4.549

Leaflet | Tiles courtesy of OpenStreetMap Sweden — Map data © OpenStreetMap

A non-monetary valuation tool based on a Q-sort methodology

- ▶ 40 statements used to represent 10 different wellbeing dimensions
 - ▶ Sorted into degrees of agreement/disagreement
 - ▶ Analysed to identify distinctive statements and groups
 - ▶ Used to establish a sub-set of 15 statements for the tool
-
- ▶ **Function:** Users can submit and explore their views on how urban green spaces affect their health and wellbeing, and compare their views with those of other people
 - ▶ **Audience:** General public, practitioners, community groups
 - ▶ **Example:** A resident completes the survey to tell us what they personally value about GI for their health and wellbeing. They can see their views mapped and compare their views with others with different age groups and across GM

Function: *Contribute views about how green and blue spaces in Greater Manchester influence your health and wellbeing and see what others say*





The screenshot shows the GHIA Value tool interface. At the top, there is a blue header with the GHIA logo on the left, the text 'The Value Tool' and 'Restart the tool' in the center, and the 'TellUs' logo on the right. The main content area is white and features a central modal window titled 'Step 1 of 3'. The modal contains the following text: 'Read the following statements carefully and split them up into three piles:' followed by a bulleted list: '• a pile for statements you tend to disagree with, [sad face emoji]', '• a pile for cards you tend to agree with, [happy face emoji] and', and '• a pile for the neutral ones [neutral face emoji]'. Below the list, it says: 'You can either drag the cards into one of the three piles or press 1, 2, 3 on your keyboard. Changes can be made later.' and 'If you want to read this instruction a second time, press the help button at the bottom right corner.' At the bottom of the modal are 'Cancel' and 'Continue...' buttons. In the background, two grey boxes are visible: 'Disagree (#1)' on the left and 'Agree (#3)' on the right. At the bottom of the page, there is a light grey footer with a 'Back' button on the left, a search bar in the center, and a 'Help me!' button on the right.

Function: *Contribute views about how green and blue spaces in Greater Manchester influence your health and wellbeing and see what others say*



The screenshot shows the GHIA Value Tool interface. At the top left, there is a GHIA logo and the text "The Value Tool" and "Restart the tool". At the top right, there is a "TellUs" logo. The main content area displays a survey question: "(4) Green spaces are important to me as places to meet and talk to other people." Below the question is a progress indicator "4/15". The response options are categorized into three groups: "Disagree (#1)", "Neutral (#2)", and "Agree (#3)". Under "Disagree (#1)", there is a red box containing the text "(7) Uneven ground in green spaces and by trees in streets make it difficult for me to get around." Under "Neutral (#2)", there is an orange box containing the text "(9) Trees have a history and connect me to my past and to the people who will come after me." Under "Agree (#3)", there is a green box containing the text "(11) Regular exercise or walks in green spaces make me healthier." At the bottom of the interface, there is a "Back" button, a progress bar showing "9%", and a "Help me!" button.

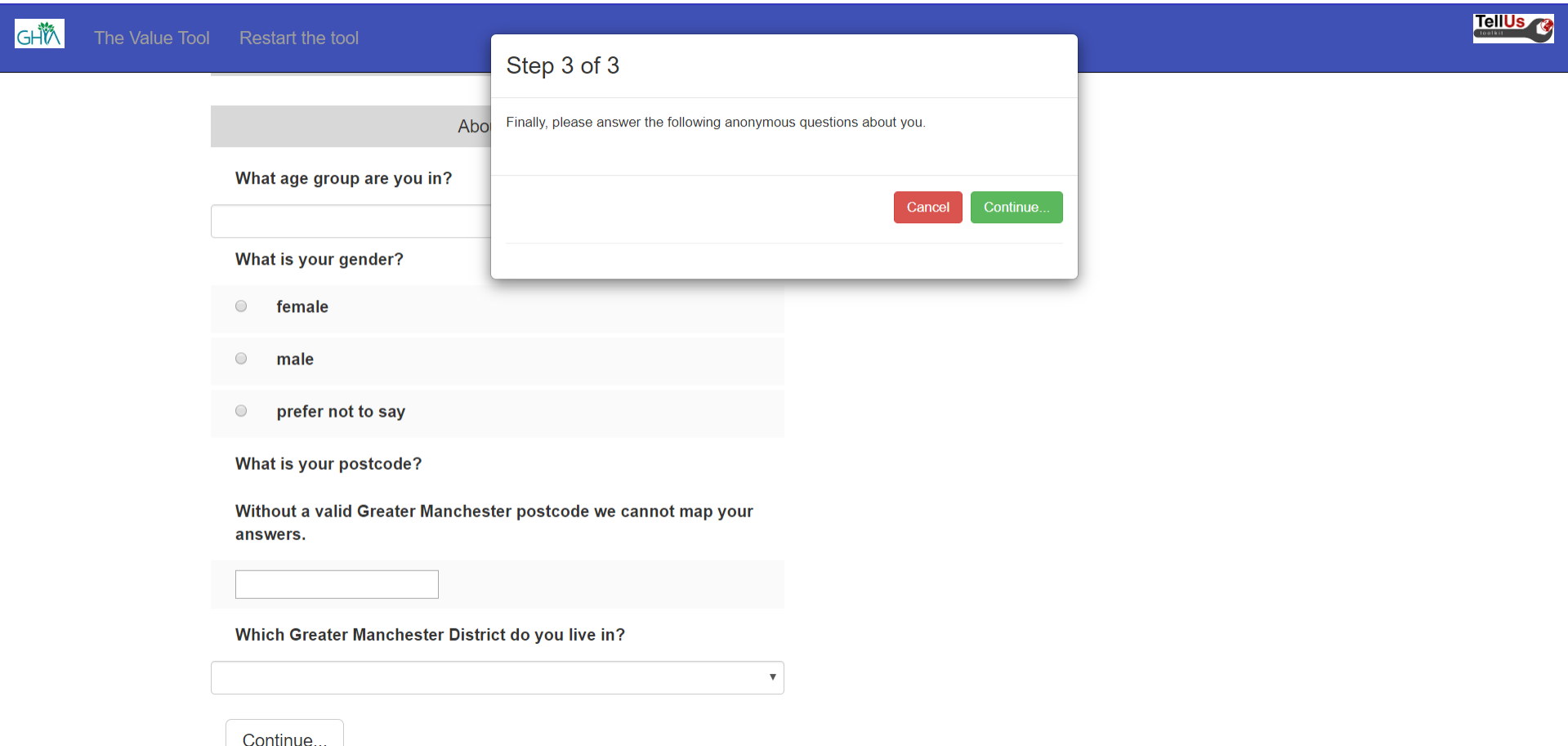
Function: *Contribute views about how green and blue spaces in Greater Manchester influence your health and wellbeing and see what others say*

 The Value Tool [Restart the tool](#)


Disagree					Agree	
-2	-1	0	+1	+2		
(14) I prefer the bustle of the city; being in nature can make me feel lonely.	(6) Volunteering in community activities with nature provides me with an	(8) I sometimes worry about crime in green spaces, and this can put me off using	(3) Working in green spaces gives me a sense of independence.	(11) Regular exercise or walks in green spaces make me healthier.		
(7) Uneven ground in green spaces and by trees in streets make it difficult for	(2) Being outdoors can be just cold, wet and uncomfortable.	(9) Trees have a history and connect me to my past and to the people who will come	(15) Green spaces are places to learn and share knowledge of nature.	(13) Green spaces offer rare moments of tranquility and help ease the stress of		
	(4) Green spaces are important to me as places to meet and talk to others.	(12) I often need to feel the fresh air or feel the weather blowing and wind.	(5) Simple connections with nature can give me a buzz, feel a bit of the best of			
		(1) I need to get out of my home and be active in the natural world.				
		(10) Green places evoke memories of people, events and adventures that have				

Disagree	Neutral	Agree

Function: *Contribute views about how green and blue spaces in Greater Manchester influence your health and wellbeing and see what others say*



The screenshot shows the 'The Value Tool' interface. At the top left is the GHIA logo, followed by the text 'The Value Tool' and a link 'Restart the tool'. At the top right is the 'TellUs' logo. The main content area contains a survey form with the following questions and options:

- What age group are you in? (input field)
- What is your gender?
 - female
 - male
 - prefer not to say
- What is your postcode?

Without a valid Greater Manchester postcode we cannot map your answers.

(input field)
- Which Greater Manchester District do you live in? (dropdown menu)

A modal dialog titled 'Step 3 of 3' is overlaid on the form. It contains the text: 'Finally, please answer the following anonymous questions about you.' and two buttons: 'Cancel' (red) and 'Continue...' (green).

Function: Contribute views about how green and blue spaces in Greater Manchester influence your health and wellbeing and see what others say

The screenshot shows the GHIA Value Tool Map interface. On the left, there is a dark teal sidebar with white text. The main area is a map of Greater Manchester with a white pop-up window centered over Wigan. The pop-up window contains the following text:

District selected: Wigan
Top two agreeable statements:
Green spaces are open places where I can associate and participate in social life
I often need to feel the fresh air or feel the weather - sunshine and wind.
Top two disagreeable statements:
Time active in nature can make me feel healthier and younger again.
I prefer the bustle of the city: being in nature can make me feel lonely.
Date submitted: 30/05/2019 15:47

On the right side of the map, there is a sidebar with various map controls and layers. The 'Base maps' section includes options for Open Street Map, OS map, Satellite image, and No base map. The 'Admin maps' section shows 'Greater Manchester' selected. The 'Greenspace maps' section includes a legend for OS Open Greenspace sites with categories like Allotments Or Community Growing Spaces, Bowling Green, Cemetery, Golf Course, Other Sports Facility, Play Space, Playing Field, Public Park Or Garden, Religious Grounds, and Tennis Court. There are also checkboxes for 'Rights of way' and 'Sites of Biological Importance (SBI)'.

Value Tool Map Built by **TellUs**

The GHIA Value tool collects information about how people in Greater Manchester value green and blue space for health and wellbeing.

Exploring the Values
You can zoom into any area of the map or search for a place you know.

You can see the top two statements that you agree and disagree with at the location you entered. You can also see the top two statements that other people have agreed with and disagreed with by clicking on the pin symbols. If you see a number on the map, you can click on it to see the individual responses.

Using your responses
We will use what you tell us to develop a better understanding of how people value green and blue spaces.

Thank you

Further information

- ▶ GHIA website: <https://ghia.org.uk/>
- ▶ Follow us on twitter  [@GHIA_VNN](https://twitter.com/GHIA_VNN)
- ▶ Interested in similar tools for your area? Please get in touch via email: g.cavan@mmu.ac.uk / sarah.lindley@manchester.ac.uk

Acknowledgements

- ▶ Richard Kingston & Vasileios Vlastaras, Tellus Toolkit, <https://www.tellus-toolkit.com/>
- ▶ John O'Neill, GHIA research team and GHIA Advisory Group