

# Environmental Justice for Birmingham

**Humera Sultan**

**Consultant in Public Health (Birmingham City Council) and National Institute  
for Health and Care Research Fellow (University of Birmingham)**



 *RESET*

 *RESHAPE*

 *RESTART*

# Outline

- **What is Environmental justice and how can you measure it?**
- **Opportunities to get involved in research for the park's agenda.**
- **The importance of collecting impact data for parks**
- **How to get in touch**
- **Questions**



# Environmental Justice



# The Index of Multiple of Deprivation

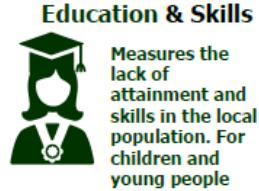
Deprivation in Birmingham by Sub Domain



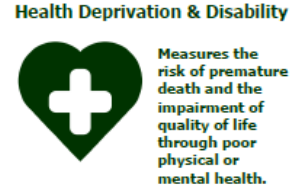
**Birmingham Rank 7th**  
2nd Highest Core City



**Birmingham Rank 20th**  
2nd Highest Core City



**Birmingham Rank 41st**  
3rd Highest Core City



**Birmingham Rank 37th**  
5th Highest Core City



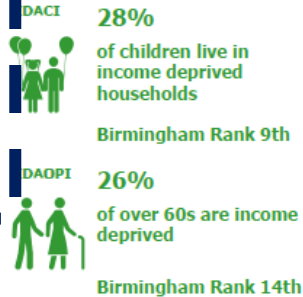
**Birmingham Rank 66th**  
2nd Lowest Core City



**Birmingham Rank 19th**  
1st Highest Core City



**Birmingham Rank 9th**  
2nd Highest Core City



## Living Environment:

- Quality of housing;
- Air quality;
- Road traffic accidents

## Environmental Justice:

- Access to Green Space
- Urban Heat Island
- Flood risk



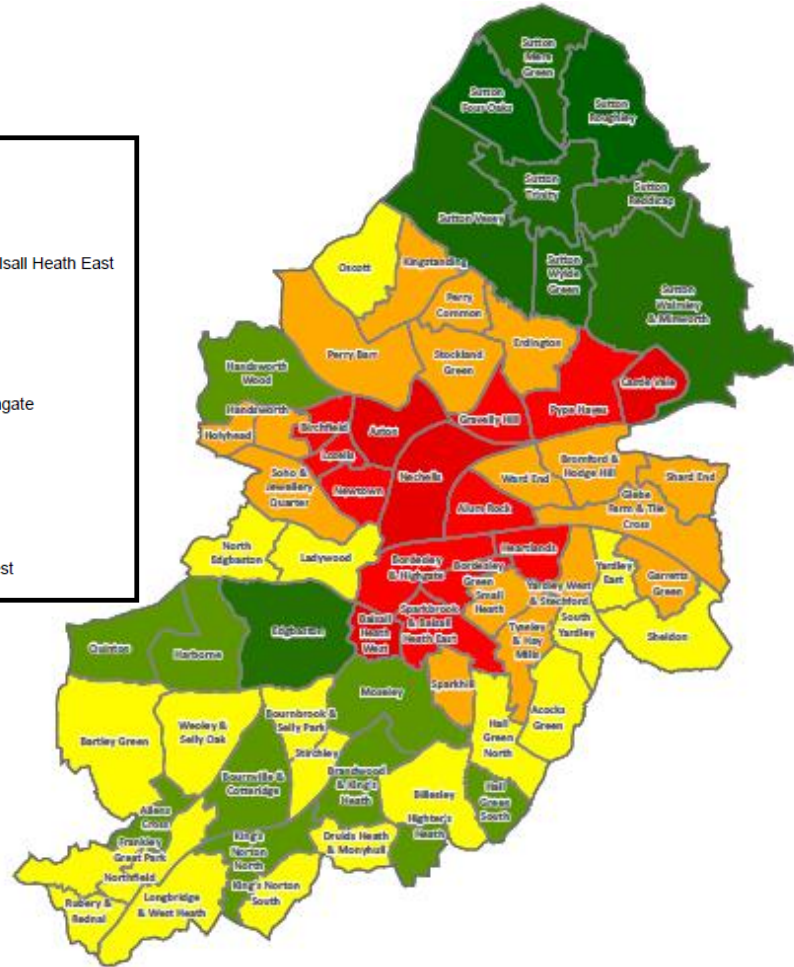
# The Environmental Justice Index (EJI)

- Notion of EJ is not new – Berlin, Germany and Virginia, USA
- Birmingham is the first UK local authority to develop a measure for Environmental Justice.
  - Access to a green space (of 2 hectares or larger) within 1 km
  - Flood Risk
  - Urban Heat Island Effect
  - Excess Years of Life Lost
  - Indices of Multiple Deprivation
- These factors respond to COVID-19 and climate change risk
- ArcGIS
- Scores calculated
- Higher score, the worse for EJ for that area



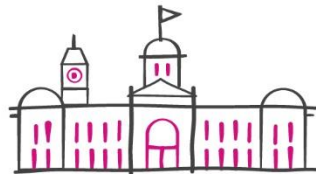
# EJI Map for Birmingham

0.12 - Sutton Roughley	0.28 - Brandwood & King's Heath	0.32 - Frankley Great Park	0.37 - Garretts Green
0.12 - Sutton Four Oaks	0.28 - King's Norton North	0.32 - Acocks Green	0.38 - Shard End
0.15 - Sutton Vesey	0.29 - Northfield	0.32 - North Edgbaston	0.38 - Handsworth
0.16 - Sutton Wyldie Green	0.30 - Rubery & Rednal	0.33 - Ladywood	0.38 - Ward End
0.16 - Sutton Mere Green	0.30 - Bournbrook & Selly Park	0.34 - Erdington	0.39 - Sparkbrook & Balsall Heath East
0.18 - Sutton Trinity	0.30 - Hall Green North	0.34 - Holyhead	0.39 - Alum Rock
0.21 - Edgbaston	0.30 - King's Norton South	0.34 - Yardley West & Stechford	0.39 - Birchfield
0.22 - Sutton Waimley & Minworth	0.30 - Yardley East	0.34 - Small Heath	0.39 - Heartlands
0.22 - Sutton Reddicap	0.30 - Weoley & Selly Oak	0.35- Tyseley & Hay Mills	0.39 - Bordesley Green
0.24 - Hall Green South	0.30 Longbridge & West Heath	0.35- Sparkhill	0.39 - Pype Hayes
0.26 - Harborne	0.30 - Oscott	0.36 - Perry Barr	0.40 - Bordesley & Highgate
0.26 - Bournville & Cotteridge	0.31 - Bartley Green	0.36 - Soho & Jewellery Quarter	0.40 - Lozells
0.26 - Moseley	0.31 - Sheldon	0.36 - Perry Common	0.41 - Gravelly Hill
0.26 - Handsworth Wood	0.31 - Billesley	0.36 - Bromford & Hodge Hill	0.41 - Newtown
0.27 - Quinton	0.31 - Stirchley	0.37 - Stockland Green	0.42 - Aston
0.28 - Highter's Heath	0.32 - South Yardley	0.37 - Kingstanding	0.42 - Nechells
0.28 - Allens Cross	0.32 - Druids Heath & Monyhull	0.37 - Glebe Farm & Tile Cross	0.43 - Castle Vale
			0.43 - Balsall Heath West



# So how did we apply it?

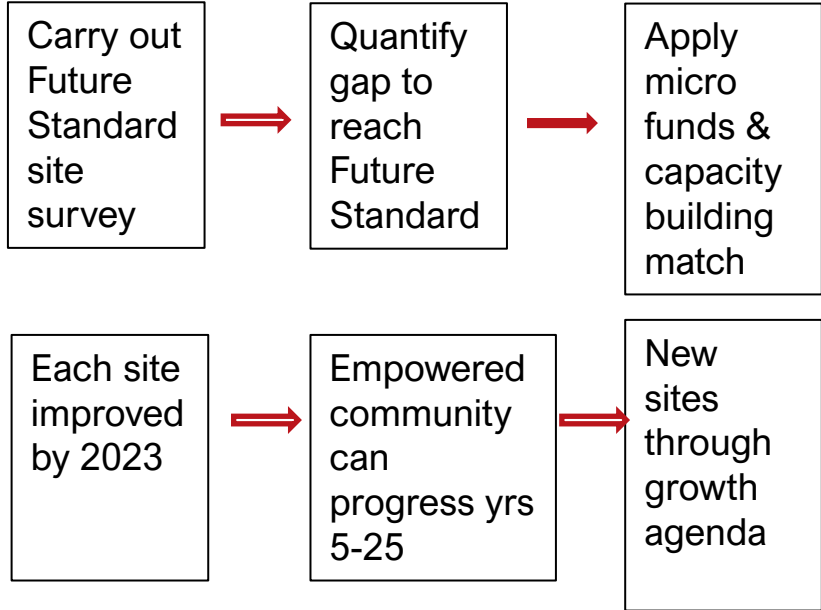
- Integral for our BCC Cabinet to agree Birmingham would become a City of Nature
- Hear our CEO talk about the plan: <https://youtu.be/5IAyoNxUiMk>
  - 25 year plan to make Birmingham a city of 1000 green spaces
  - Improve quality and quantity of green space in our city
  - Strategic importance – East Birmingham
  - First 6 wards – Bordesley & Highgate, Nechells, Castle Vale, Gravelly Hill, Pype Hayes, (and Balsall Heath West).
  - Secured £500,000 to improve parks in these 6 wards over 5 years.
  - Pilot to create an Alliance of organistaions and make improvements to parks in Bordesley & Highgate Ward.



# Bordesley and Highgate

We looked five Green Space Sites in this Ward:

- Highgate Park
- Kingston Hill Park
- Garrison Lane
- New Hope Park
- Denbigh Street Park

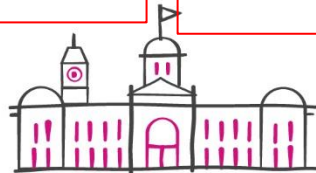




# Impact of Bordesley & Highgate ward pilot

- Noticeboards installed on all parks
- New bins were installed and litter picking made a priority
- Native plants were added
- Activities were delivered by the City of Nature Alliance to engage community.

- People knew who was responsible for the site
- People saw the site was cared for and litter was reduced
- Provided more colour and interest, and better for wildlife
- People took part in activities and now help to care for the sites.



# Impact of Bordesley & Highgate ward pilot



# What's next?

- Move to Nechells ward
- Complete Masterplan for the whole East Birmingham area (20 wards) with costs for a range of examples creating more green infrastructure.



# How can you apply the EJI to your own area?

## ▪ Watch the webinar:

- [Environmental Justice Webinar 20211123 130439 Meeting Recording – YouTube](#)

## ▪ Read the paper:

- Sultan H, Grayson N, Jones S, Pike D, Greenham S, Needle D, Sadler J, Frew E. Green space and environmental justice—a new metric to guide resource allocation in improving the amount and quality of green space. TCP Journal 2023. 92 (6).
- Available at [Nov-Dec23.pdf \(tcpa.org.uk\)](#)

## ▪ Contact Humera Sultan:

- [Humera.Sultan@birmingham.gov.uk](mailto:Humera.Sultan@birmingham.gov.uk)



# CONTRIBUTING TO THE PARKS RESEARCH AGENDA



**BE BOLD BE BIRMINGHAM**



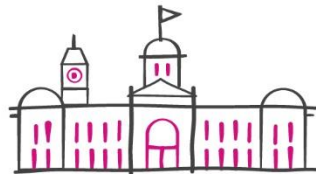
# Doctoral Local Authority (LA) Fellowship Scheme

- 0.5 wte research fellow from March 2022 to February 2024
  - Funded by NIHR – National Institute of Health Research
  - Open to any LA staff member
- 0.5 wte Consultant in Public Health
- Developed a PhD proposal
- ***How can LAs use health economics evidence and adaptive leadership to inform investment in parks***
- If successful, funding for role and PhD will be wholly met by NIHR



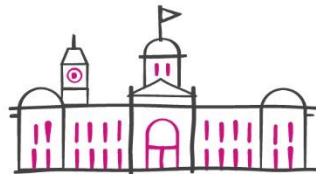
# Key objectives of research

1. To explore the historical distribution of (dis)investment in parks by geographic region and deprivation across Birmingham and understand how this (dis)investment has impacted on quality of parks over time.
2. To understand how a range of actors within LAs conceptualise the value generated from parks, and to what extent these different notions of 'value' are used to inform (dis)investment decisions.
3. To build on findings from 1 and 2 to develop a conceptual model for articulating the value of parks.



## Or in a nutshell.....

- This PhD aims to give LAs the tools to articulate the value of parks and thus make the argument for appropriate investment in them
- Plan is to work with Birmingham, Coventry, Plymouth and Walsall LAs
- If park services from other LAs are interested, pls contact Humera on [Humera.Sultan@birmingham.gov.uk](mailto:Humera.Sultan@birmingham.gov.uk)





# Impact data for parks



# What is impact data?

- Also can be referred to as outcomes
- Anything that tells us that a difference is being made
- BUT outputs or numbers of people being impacted is also useful to know
- What counts as impact?
  - Are people more physically active?
  - Has their mental wellbeing improved?
  - Are they more connected to their communities?
- Impact data is crucial if LAs are to secure and maintain more investment for parks



# What kind of output data would be useful to funders?

- **Number of people using parks**
  - More an output rather than impact
  - One of the hardest thing to measure
  - BCC have trialled people counters in 3 parks – showed clearly when our parks are busiest and quietest to help with planning events
- **Number of people benefitting from parks led activities**
  - Conservation sessions, walks, litter picking, family days
  - Number of people volunteering their time in parks
- **Demographics**
  - Comes back to the equity issue



# What kind of outcome/ impact data would be useful to funders?

- The literature around parks and health tells us people that use parks tend to be more physically active, have better mental health and have better community connectivity.
- To measure ***physical activity*** – standardised tools include Active Lives Short Form
- To measure ***wellbeing*** – standardised tools include Short Form of the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)
- To measure ***community connectivity*** – could be as simple as measuring number of hours of volunteering



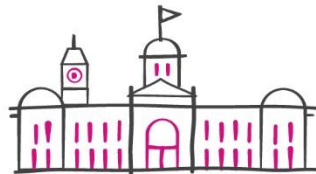
# Tips for measuring impact

- ***Use your Public Health team***

- They will be able to advise you on how to collect data, tools to develop and pitfalls to avoid

- **Think about *apps* that already exist**

- In Birmingham, we are trialling an app by Podnosh called the ‘impact assessment app’
- Or a simple Microsoft Office form will do the job too



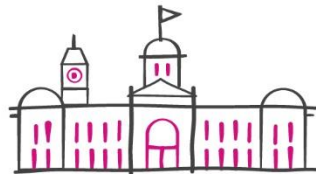
# Acknowledgements

- **Nick Grayson**, Green City Manager, BCC (now retired)
- **Debbie Needle**, Community Facilitator, Birmingham Open Spaces Forum
- **Simon Needle**, Principle Arboriculturist, BCC
- **Joe Hayden**, Head of Parks, BCC
- **Stephen Jones**, Head of Geographical Information Systems, BCC
- **Sarah Greenham**, Research Fellow, University of Birmingham
- **Emma Frew**, Professor of Health Economics, University of Birmingham



# List of resources

- [Environmental Justice Webinar 20211123 130439 Meeting Recording – YouTube](#)
- [Nov-Dec23.pdf \(tcpa.org.uk\)](#)
- [Our Future Nature City Plan | Our Future Nature City Plan | Birmingham City Council](#)
- [Pre-doctoral Local Authority Fellowship \(PLAF\) Round 4 | NIHR](#)



# Questions?

- Contact Humera on [Humera.Sultan@birmingham.gov.uk](mailto:Humera.Sultan@birmingham.gov.uk)







@BhamCityCouncil



@birminghamcitycouncil



@birminghamcitycouncil



birmingham.gov.uk

