

# Park Prioritisation

Building a Composite Indicator of Green  
Infrastructure Demand in London

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**1. Context & motivation**

**2. Approach & methods**

**3. Results & recommendations**

**1. Context & motivation**

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# Green Infrastructure:

*“A network of green spaces - and features such as street trees and green roofs - that is planned, designed and managed to provide a range of benefits”*

(Greater London Authority, 2012)

# Green Infrastructure:

*“provides multiple benefits, notably ecosystem services, at a range of scales”*

(Ministry of Housing, Communities & Local Government, 2018)

# Research Question 1

Prioritising based on demand

Can publicly available data be used to create a comprehensive measure of GI demand, which accounts for the many benefits it can deliver?

# Research Question 2

Investigating patterns of demand

Can such a measure provide insight into localised patterns of GI demand in order to highlight opportunities for multifunctional GI approaches?

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# The English Index of Multiple Deprivation (IMD) 2015

The official measure of relative deprivation for small areas

**The IMD ranks each small area in England**  
from:

**1<sup>st</sup>**

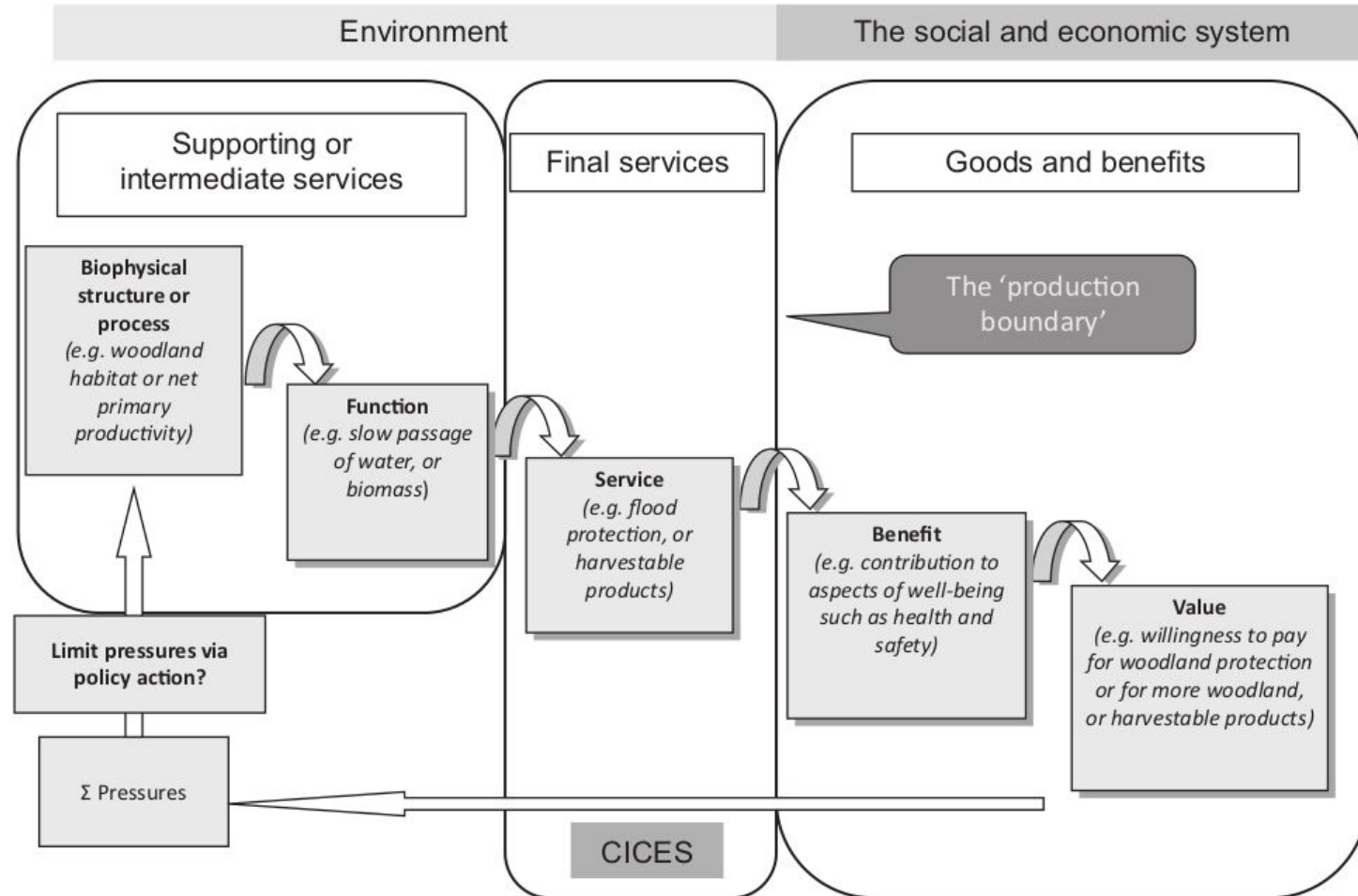
most  
deprived area



**32,844<sup>th</sup>**

least  
deprived area

32,844 small areas (called Lower-layer Super Output Areas) in England with an average of 1,500 residents each



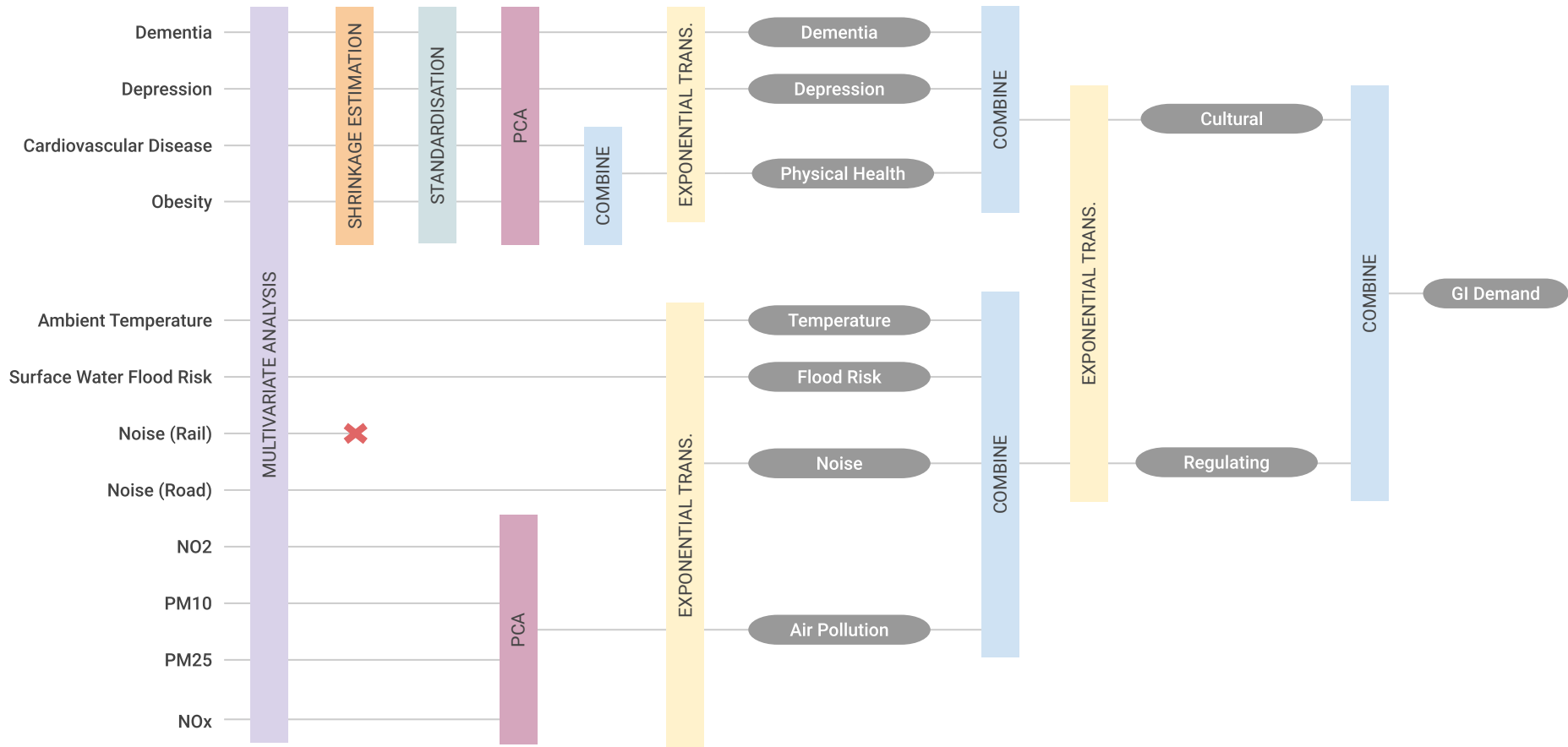
Category	Ecosystem Service	Benefit	Demand Indicator
Cultural	Recreation & relaxation	Improved physical health	Obesity prevalence
			Cardiovascular disease prevalence
		Improved mental health	Depression prevalence
			Dementia prevalence
	Sense of place & social capital	Improved networks and social trust	
	Environmental Learning	Improved resilience and adaptive capacity in urban systems	
Regulating	Air filtration	Reduced health impacts from air pollution	Air pollution levels
	Temperature regulation	More amenable living environment	Ambient temperature
	Surface water capture	Reduced likelihood of flooding and property damage	Surface water flood risk
	Noise Regulation	More amenable living environment	Ambient noise
Habitat	Biodiversity conservation	Improved resilience of green spaces	

## Datasets

## Indicators

## Domains

## Composite Index



**1. Context & motivation**

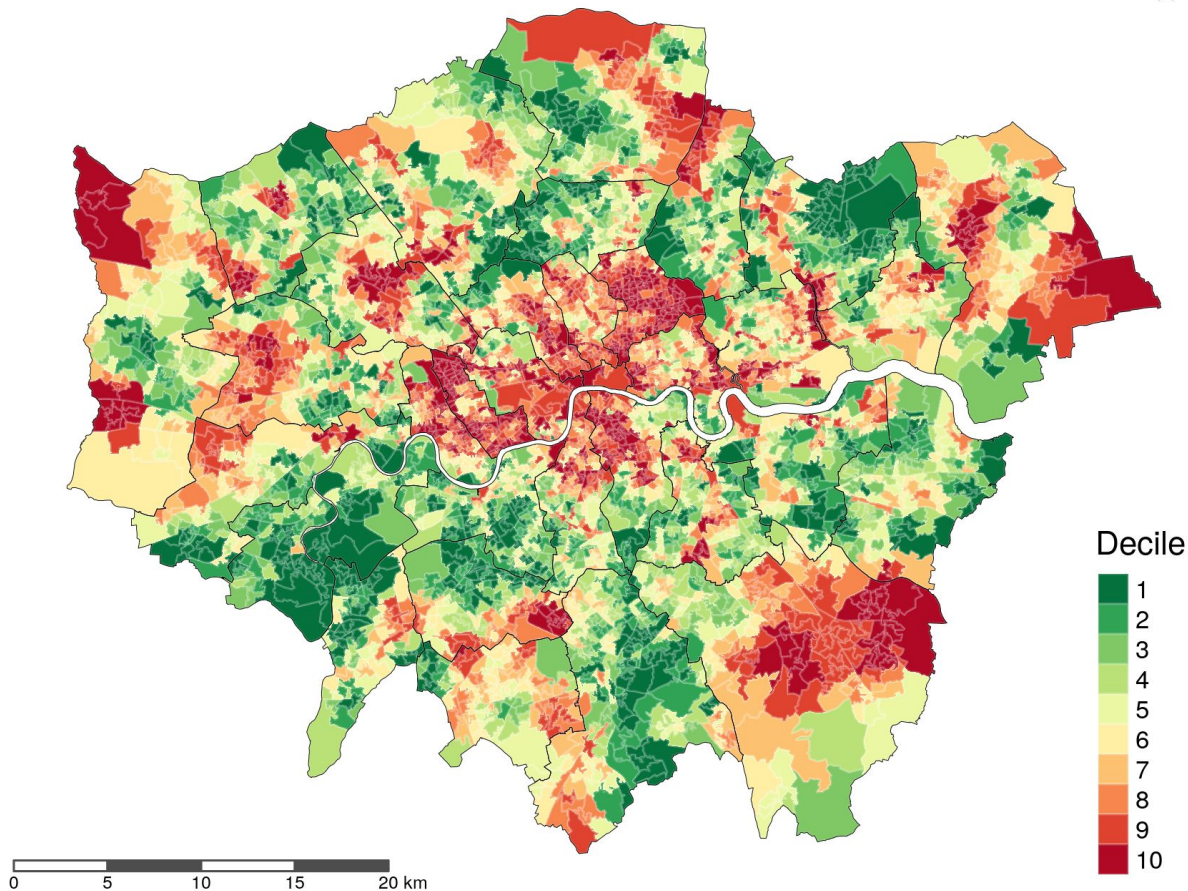
**2. Approach & methods**

**3. Results & recommendations**

# London GI Demand - Index and Domain Deciles

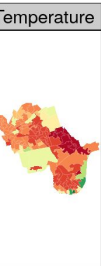
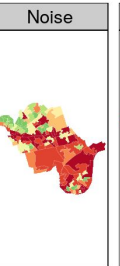
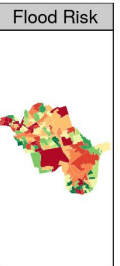
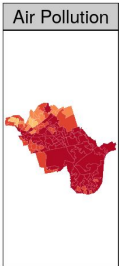
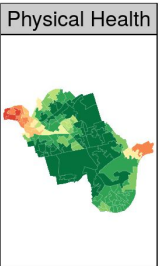
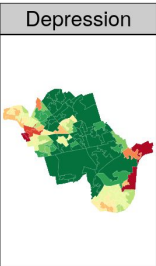
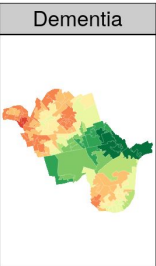
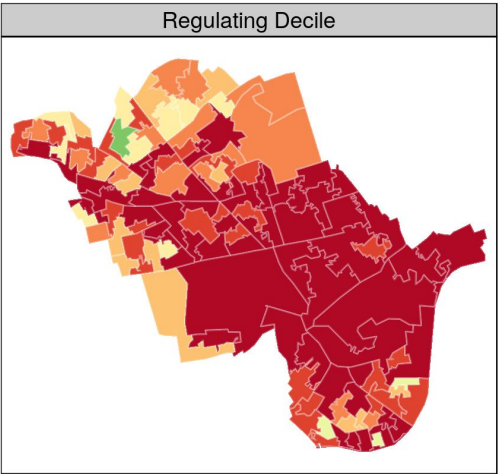
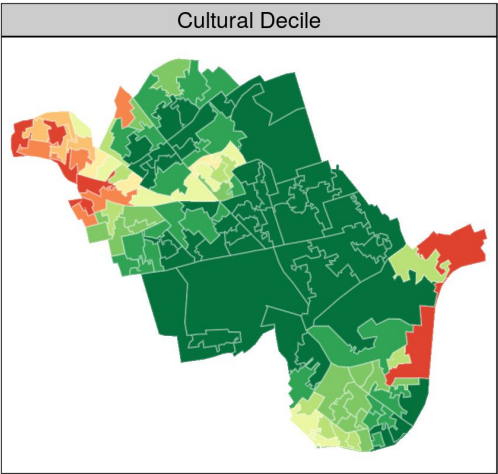
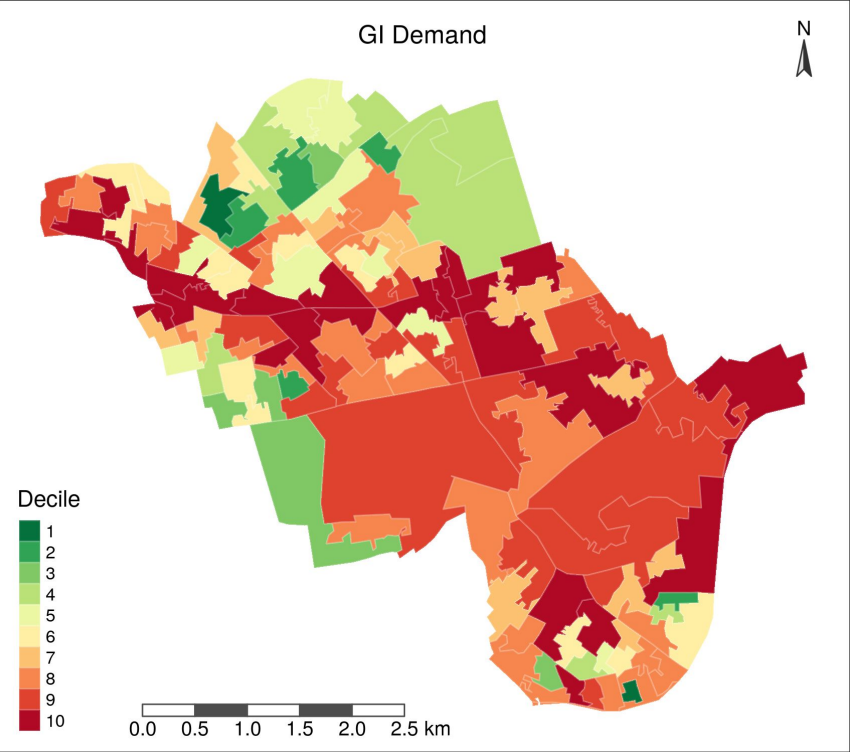
GI Demand

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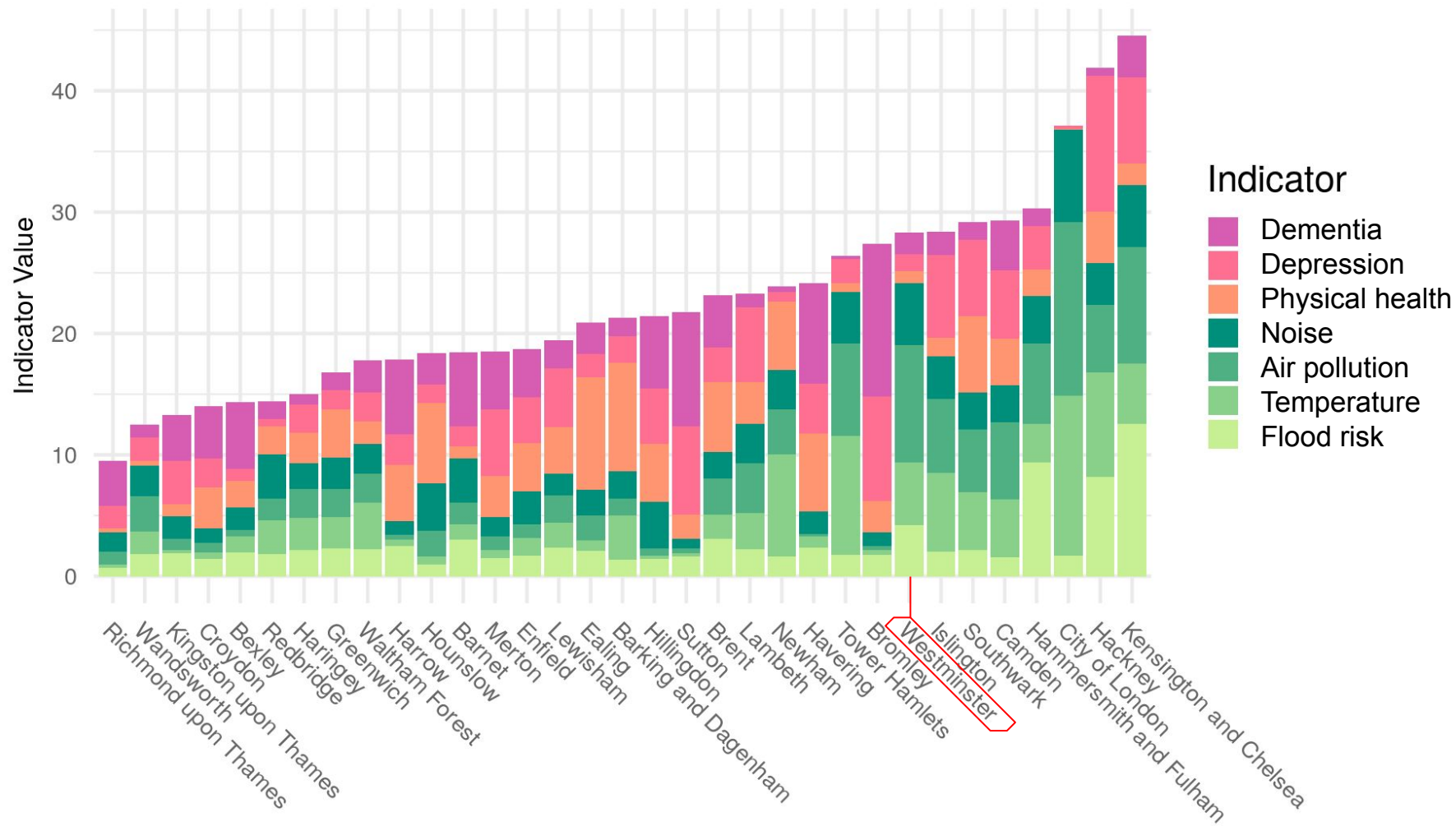




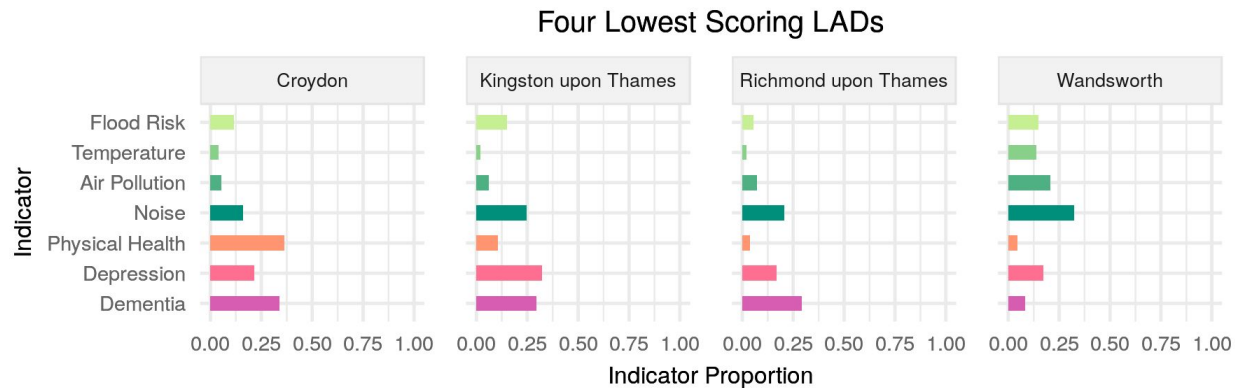
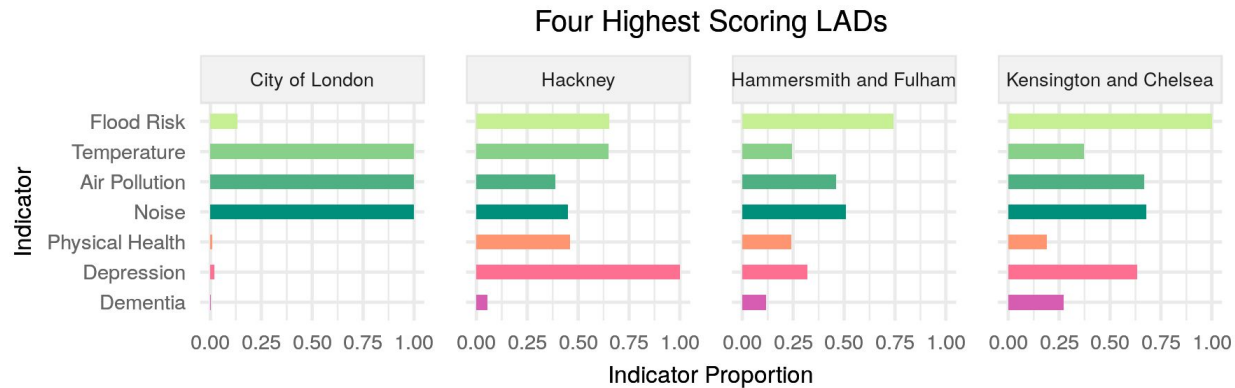
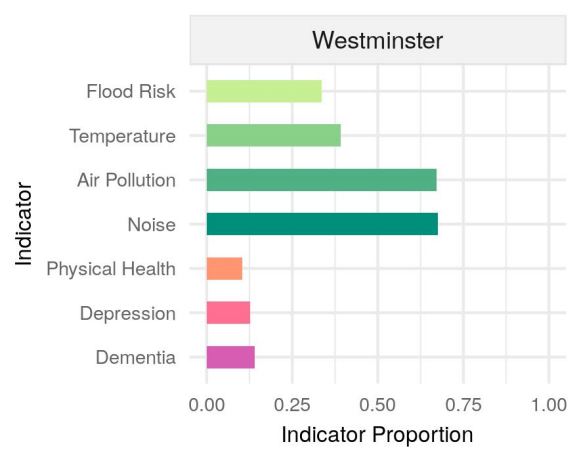
Westminster GI Demand - Index, Domain and Indicator Deciles



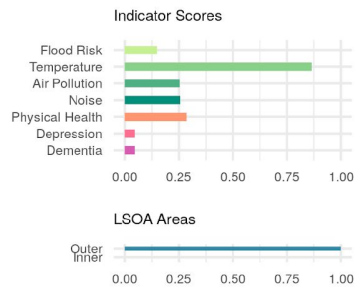
# Decomposed Indicator Scores by LAD



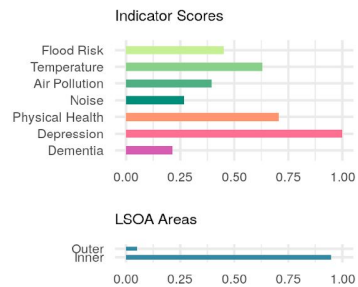




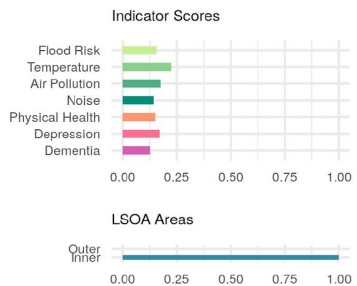
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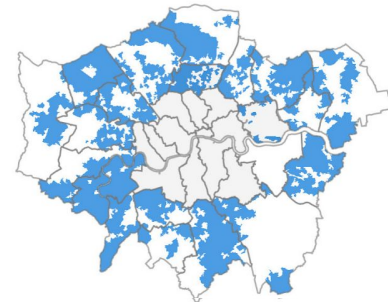
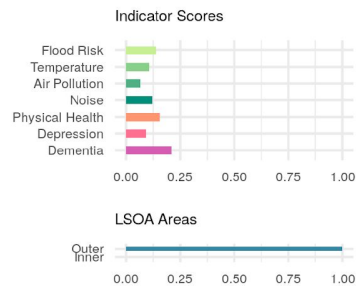
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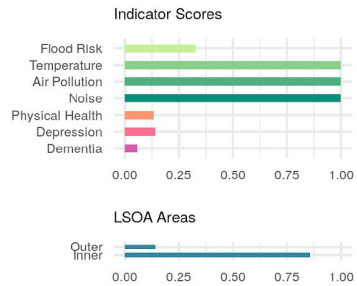
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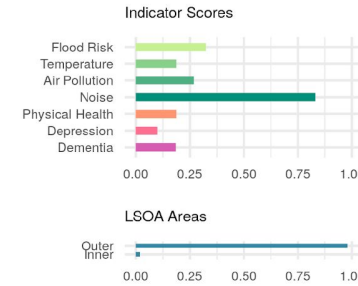
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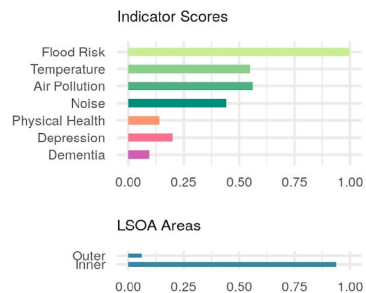
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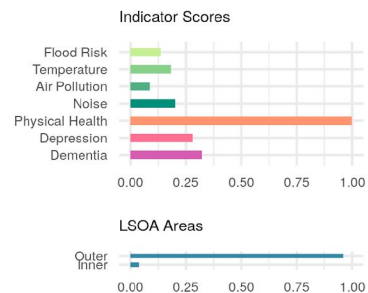
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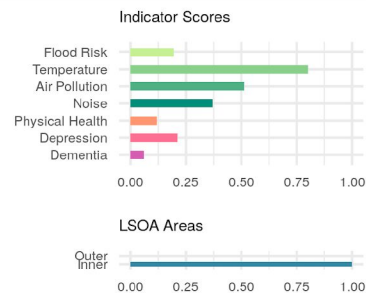
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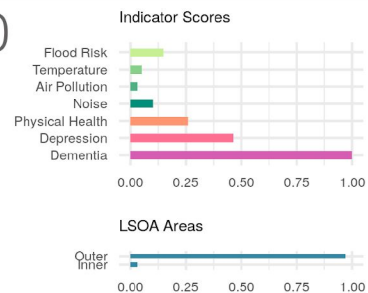
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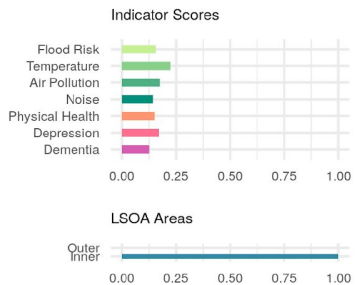
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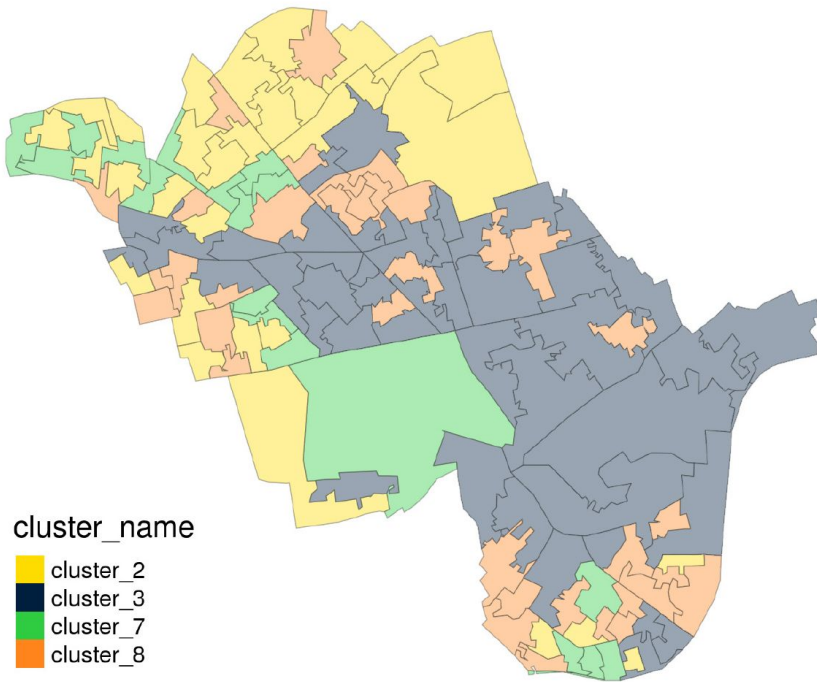
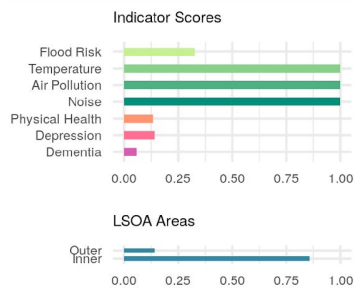
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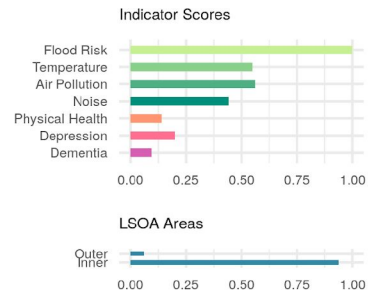
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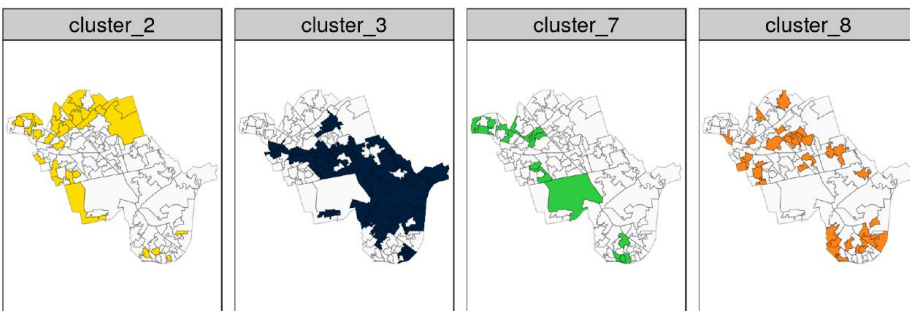
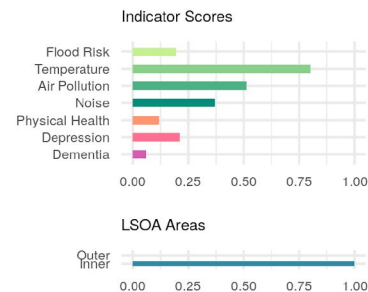
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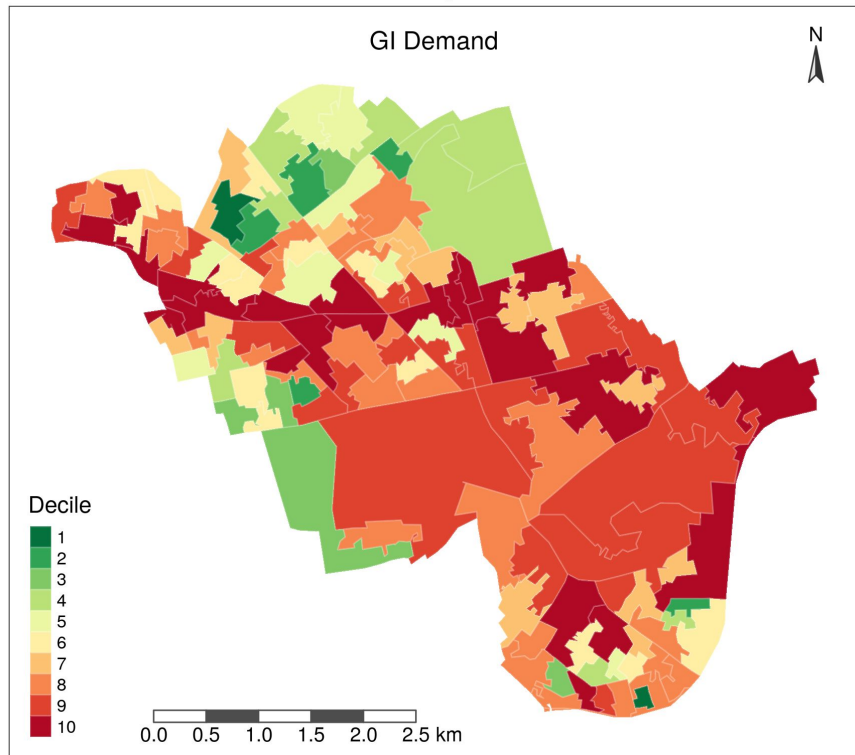
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# Recommendation 1

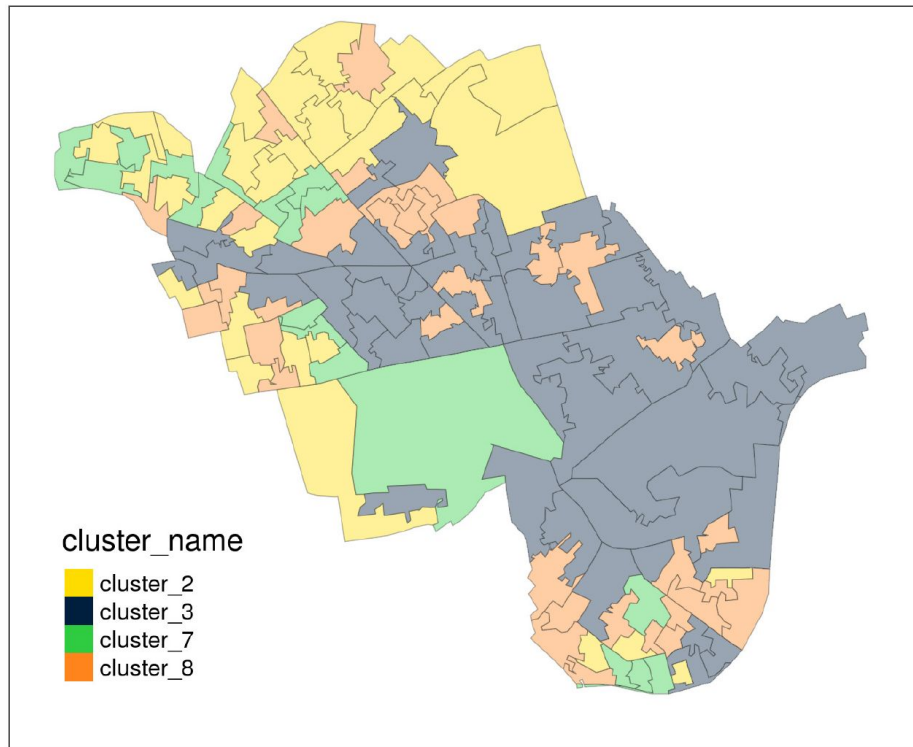
Prioritise GI effort in high-demand areas

Westminster GI Demand - Index, Domain and Indicator Deciles



# Recommendation 2

Plan GI functions  
based on demand  
patterns



**Any questions?**

**Full project, executive summary, code & images available at:**

<https://github.com/greg-slater/dissertation/>