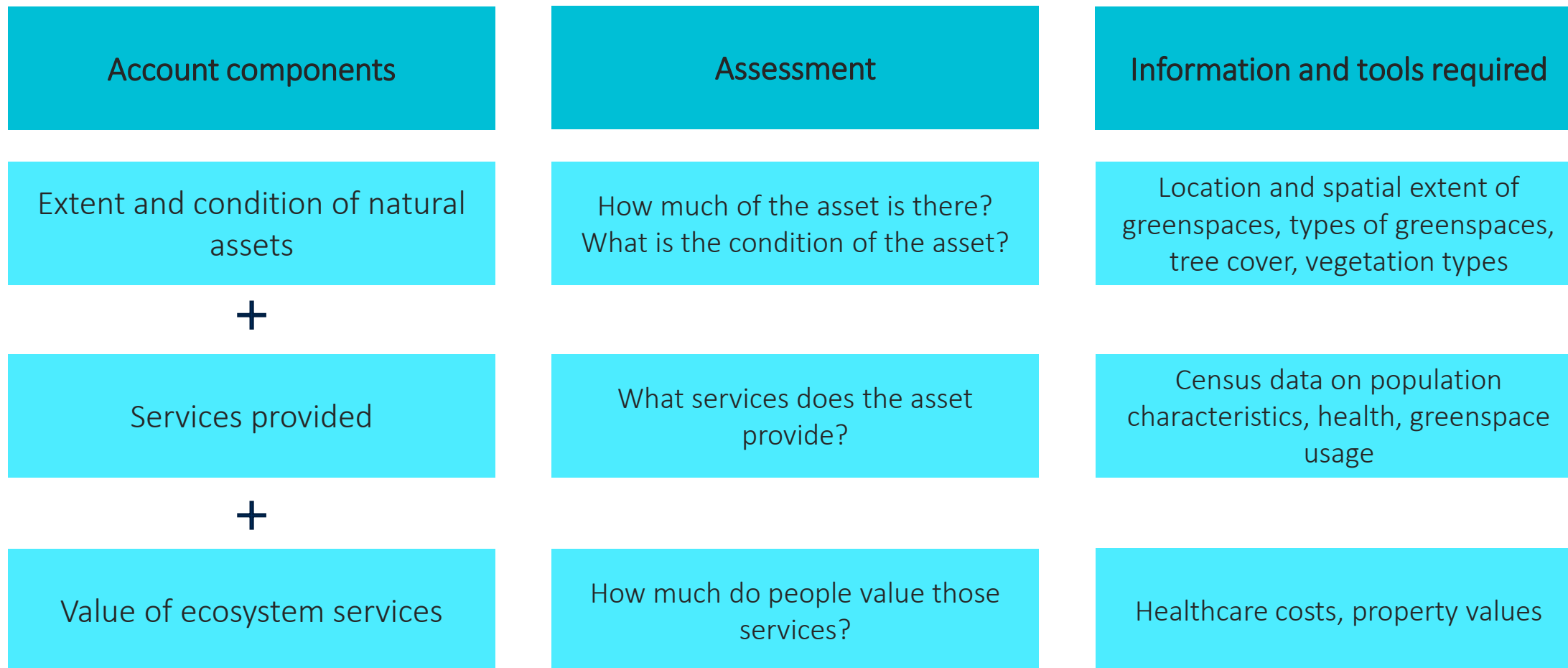


• Building a natural capital account for London

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Building London's natural capital account



Step 1: Mapping London's natural assets using GIS data



0 2 4 8 12 16 Miles

Type of green space	Area (ha)	Proportion
Parks and gardens	9,207	29%
Natural and semi-natural urban greenspace	8,467	27%
Amenity	6,578	21%
Outdoor sports facilities	6,225	20%
Allotments, community gardens and city farms	979	3%
Play areas	71	<1%
Total	31,527	100%

Step 2: Linking natural assets with services in the city

		Recreation	Physical activity	Tourism	Aesthetic, place making	Spiritual, educational	Air quality
Small built features	Green roof/wall				•		•
	Green corridor		•		•		•
	Street trees				•		•
	Small greenspace	•			•		•
Other green areas	City farms	•				•	
	Public squares, commons	•	•	•	•		•
	Sports pitches	•	•				
	Public/domestic gardens	•			•	•	•
Parks	Local parks	•	•	•	•	•	•
	Regional/national parks	•	•	•	•	•	•
Natural features	Wetlands, rivers	•				•	•
	Woodland	•				•	•

Register of ecosystem services provided by greenspaces and data required

Asset	Ecosystem Service	Type of service	Data needs
Green space	Physical activity and health	Cultural	Amount of greenspaces Survey/observed data on park visit frequency and activities, Census data on population characteristics and health outcomes Disease costs
	Mental wellbeing	Cultural	
	Amenity (revealed in property price)	Cultural	Amount of greenspaces Hedonic pricing model relevant to city context Property values
	Recreation	Cultural	Annual visits to greenspaces Cost paid to travel to each space
	Carbon sequestration	Regulating	Amount of greenspaces Vegetation types Tree cover Carbon price
	Local temperature regulation	Regulating	Cooling due to greenspaces on hot days Avoided health costs

Step 3: Modelling economic benefits of greenspaces – mental health example

1. Dose-response relationship from White *et al.* (2013) between density of green space in 4,800 local areas and mental health outcome.

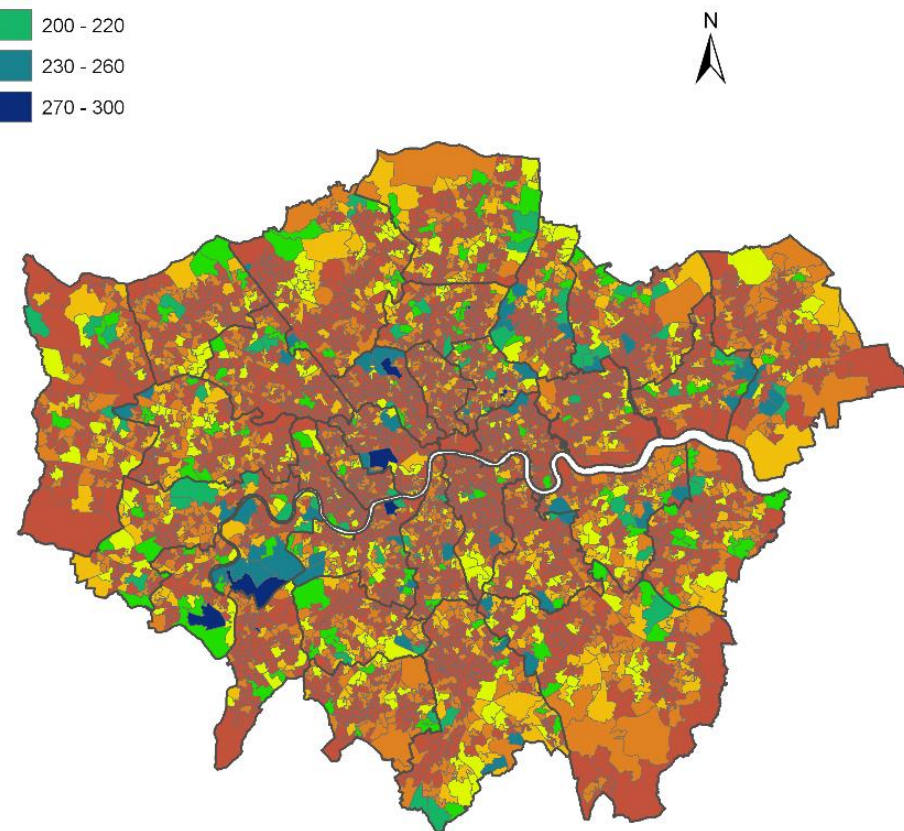


2: Value to reductions in mental health burden based on the benefits of avoided incidence of mental health due to green space in each administrative area.



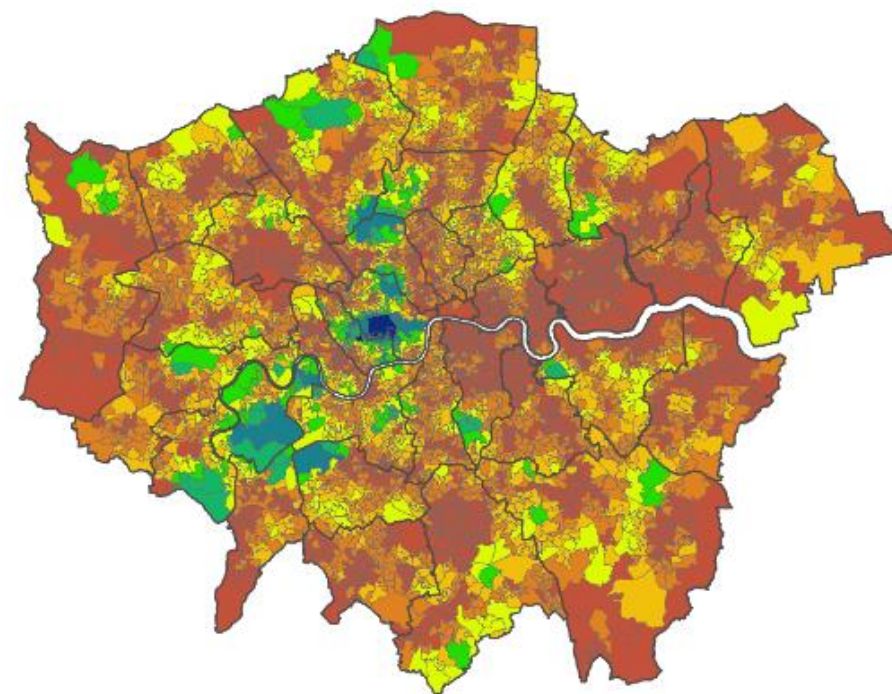
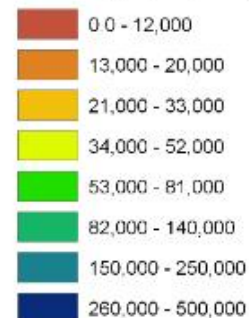
Avoided mental health costs can be disaggregated by area and per person

Category	Value
Annual reduction in mental health costs	£368 million per year
Proportion of total mental health costs	2%
Average per person benefit	£42 per year



Green spaces also significantly increase property prices across London

Average property price uplift per household (£)

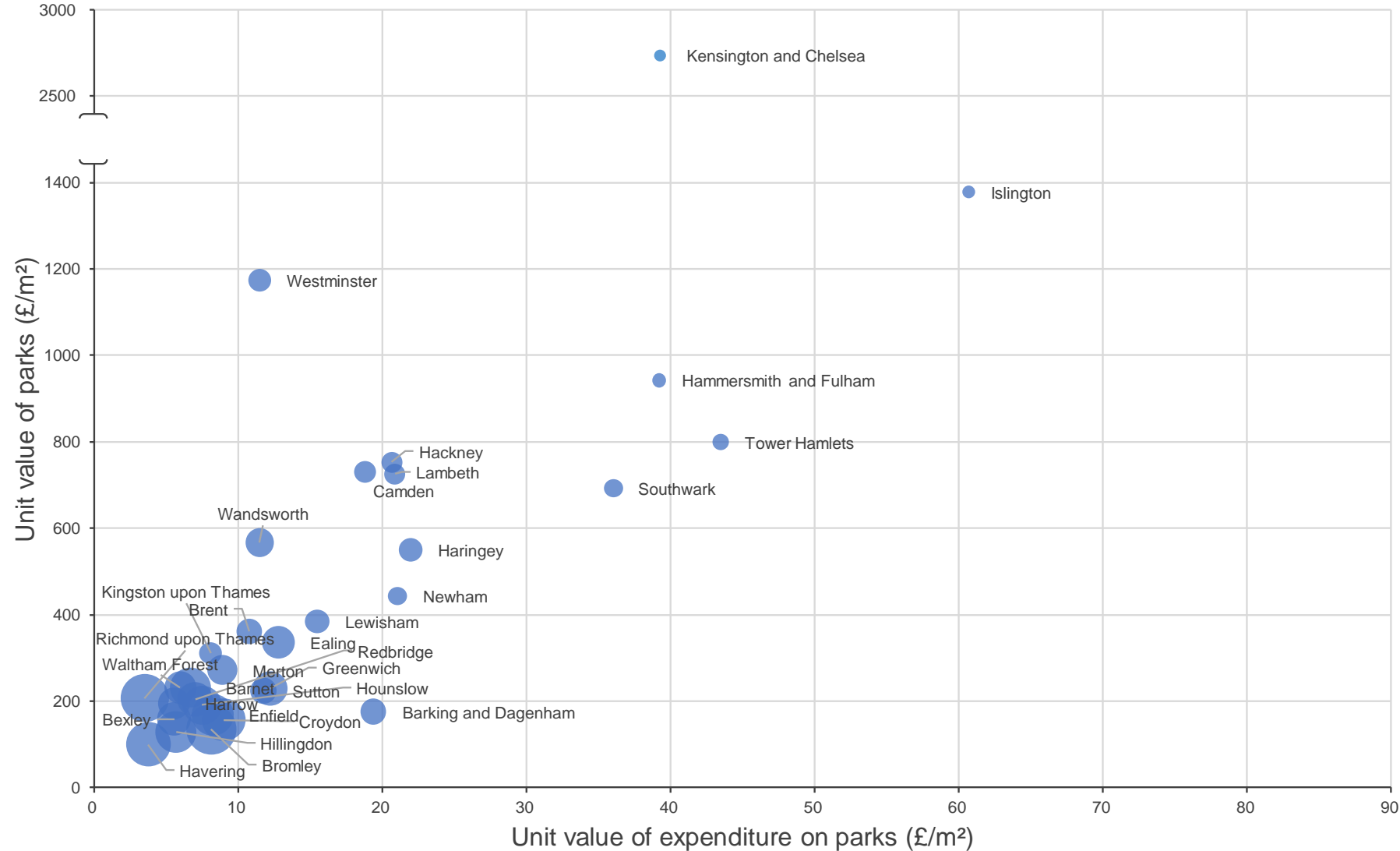


Category	Value
Average property price uplift per person	£17,000
Uplift as proportion of total value	3.4%
Annual per person value	£410

London's natural capital account illustrates how public services, individual residents and business benefits from green spaces

	Public services (£ billions)	Residents (£ billions)	Business (£ billions)	Total (£ billions)	Share (%)
Recreation		17		17	19
Mental health	1	3	2	7	7
Physical health	2	5	3	11	12
Amenity		56		56	61
Carbon				<1	1
Temperature		1		1	1
Gross asset value	3	82	5	91	100
	4%	90%	6%	100%	

The benefits of natural assets are highest in districts able to spend more



• Thank you

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