A Needs Assessment relating to the Provision of Natural Greenspace in areas with Low Levels of Physical Activity

Report for Canterbury City Borough Council

20 May 2016

natural values
valuing people and the environment

Kent & Medway
Biological Records Centre

DICE
University of Kent
School of Anthropology and Conservation

Imperial College London
Consultants

Report to:

Kent Nature Partnership

Health & Nature Subgroup

A Needs Assessment relating to the Provision of Natural Greenspace in areas with Low Levels of Physical Activity

Report for Canterbury City Council

Prepared by:

Teresa Bennett, Natural Values

Zoe Davies, Durrell Institute of Conservation and Ecology (DICE)

Susan Hodgson, Medical Research Council – Public Health England (MRC-PHE)

Centre for Environment and Health, Imperial College London

Tristan Pett, Durrell Institute of Conservation and Ecology (DICE)

Tony Witts, Kent and Medway Biological Records Centre (KMBRC)

20 May 2016

Contents

1. Introduction

This report is one in a series regarding a needs assessment of natural greenspace provision in areas of Kent where the population is physically inactive. It presents the results covering the District of Canterbury. The methodology is reported separately. The background to the study and the results for the whole of Kent are covered in the Main Report.

This study set out to establish the proximity, accessibility and naturalness of greenspace in areas of Kent where the population is characterised by low levels of physical activity. Subsequently, this assessment was used to prioritise areas for future action and investment, based on levels of population deprivation, size and need.

Throughout the report 'accessibility to greenspace' (including 'access of greenspace') refers to a site being accessible via some form of public right of way. However, this does not necessarily mean that the site is accessible to all sectors of society (e.g. individuals with a physical disability); accounting for the quality of the access route was beyond the scope of this project.

Greenspace is defined as *'places where human control and activities are not intensive so that a feeling of naturalness is allowed to predominate'* (as described by Natural England[1]). Greenspace includes '*all open space of public value, including not just land, but also areas of water such as rivers, canals, lakes and reservoirs which offer important opportunities for sport and recreation and can also act as a visual amenity*'[2].

Physical activity is defined on the basis of '*body movement that expends energy and raises the heart rate*'[3].

The specific objectives for the Kent-wide project were to:

1. Produce a needs assessment that identified accessible greenspace within the Lower Super Output Areas (LSOAs) of Kent, particularly those with the highest levels of deprivation and where a high proportion of the population are physically

[1] Natural England (2010) *'Nature Nearby' Accessible Natural Greenspace Guidance.* http://webarchive.nationalarchives.gov.uk/20160323000001/http://publications.naturalengland.org.uk/publication/40004. Accessed 24/3/16.
[2] ODPM (2002) *Planning Policy Guidance 17: Planning for open space, sport and recreation*. HMSO
[3] Public Health England (2014) *Everybody active, every day: An evidence-based approach to physical activity*.

inactive. The methods used were to be transparent and repeatable, thus facilitating future updates for Kent or application of the same approach in different counties.

2. Stratify and prioritise LSOAs where future action should be taken to improve provision of greenspace or increase use of existing greenspace in order to improve population health by promoting increased outdoor physical activity and engagement with the natural environment.

2. Method summary

A more detailed description of the methodology can be found in the dedicated Methodology report, as well as the Main Report for Kent. An outline of the methods used is provided here to assist in data interpretation.

The study used four types of spatial data for Kent covering boundaries, access routes, greenspace (Figure 1) and population. Interpretation of a 'feeling of naturalness' is guided by a four stage rating as a proxy for measuring naturalness[4] (Box 1). This guidance was used to assign a level of naturalness to each area of greenspace.

Box 1: Naturalness levels according to Natural England (2010) 'Nature Nearby' Accessible Natural Greenspace Guidance.

Categories for 'feeling of naturalness'[5]:

Level 1

- Nature conservation areas, including Sites of Special Scientific Interest (SSSIs)
- Local sites, including local wildlife sites, Regionally Important Geological Sites (RIGS)
- Local Nature Reserves (LNRs)
- National Nature Reserves (NNRs)
- Woodland
- Remnant countryside (within urban and urban fringe areas)

Level 2

- Formal and informal open space
- Unimproved farmland
- Rivers and canals
- Unimproved grassland
- Disused/derelict land, mosaics of formal and informal areas of scrub etc
- Country parks
- Open access land

Level 3

- Allotments
- Church yards and cemeteries
- Formal recreation space

Level 4

- Improved farmland

[4] Natural England (2010) *'Nature Nearby' Accessible Natural Greenspace Guidance*.
[5] Ibid

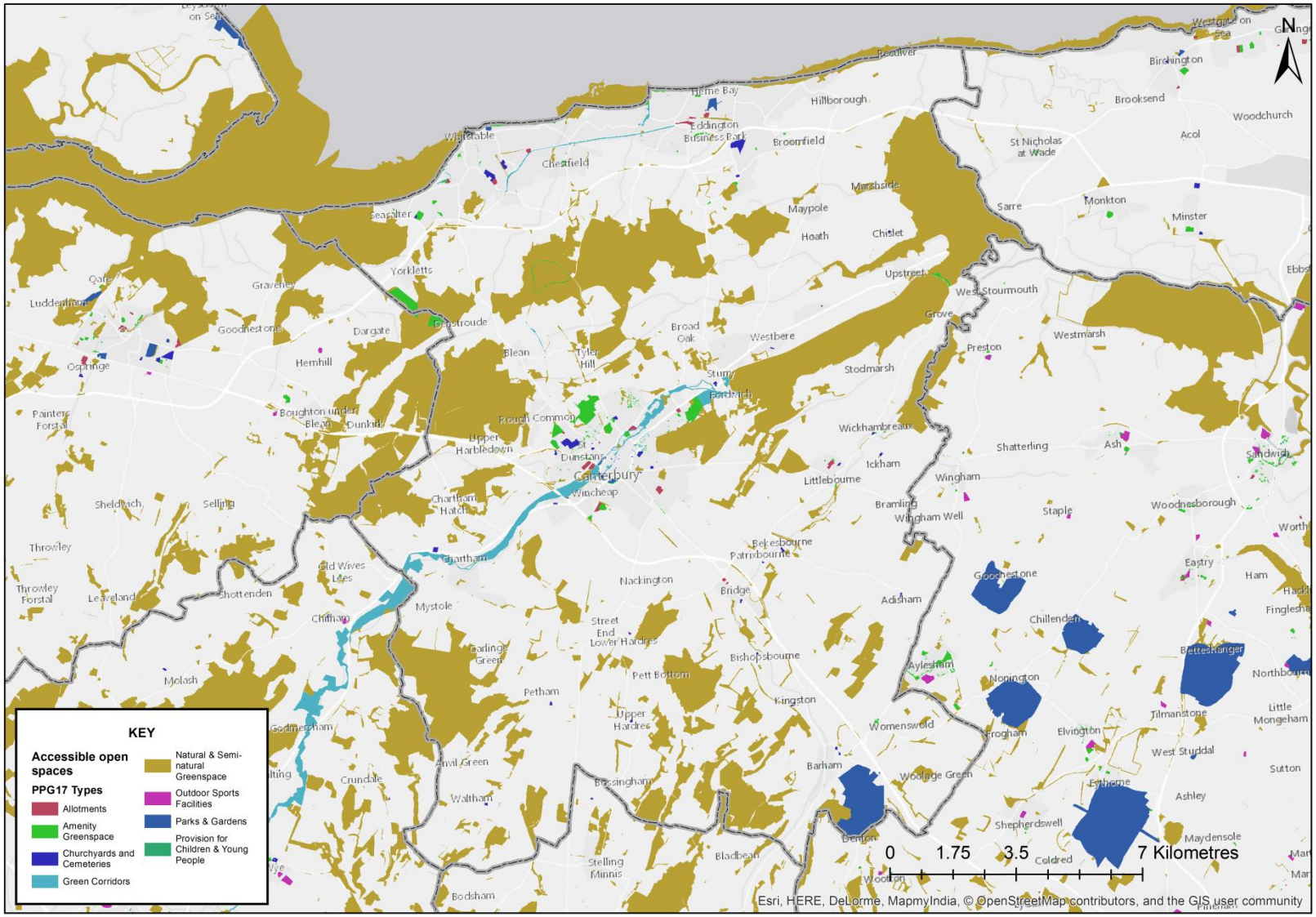

Figure 1: Greenspace in the District of Canterbury mapped according to PPG17 typologies

Two sets of accessibility standards were used to identify greenspace provision for the population at each postcode: Access to Natural Greenspace Standard[6] (ANGSt) and Dover District Council accessibility standard[7] (Box 2). The analyses were repeated for two combinations of site naturalness: (i) naturalness level 1, 2 & 3 and, (ii) naturalness level 1 (more 'natural' greenspaces). The analyses used distance along access routes (footpaths and pavements) from postcodes to greenspace entrance points.

Box 2: Accessibility standards used in this study

ANGSt:

- At least 1 site >2 ha within 300 m of where people live
- At least 1 site >20 ha within 2 km of where people live
- At least 1 site >100 ha within 5 km of where people live
- At least 1 site >500 ha within 10 km of where people live

DDC accessibility standard:

- At least 1 site >0.4 ha within 300 m of where people live in urban locations or at least 1 site >2 ha within 1 km of where people live in rural locations

Three methods of assessing greenspace provision were explored:

- Service area – which determines the potential distance travelled to access a greenspace via an entry point, following an access route (this method underpins most of the presented results).
- Buffer intersection – a Euclidean, or straight-line, method which assumes that greenspace is accessible to the public at any point around the edge of the site.
- Allocation – which uses Euclidean distance from postcode to greenspace entry points, rather than assuming that a site can be entered at any point along its edge.

Each method has its pros and cons due to complexity of execution and the assumptions made (see Methodology report). Following consultation with KCC, the service area method and results are presented as the core analyses.

[6] Natural England (2010) *'Nature Nearby' Accessible Natural Greenspace Guidance*.
[7] DDC Parks and Amenity Open Space Strategy 2013 & Land Allocations Local Plan 2015.

Data were analysed at the geographic resolution of Lower Super Output Area (LSOA) and subsequently categorised by Rural-Urban classification[8], the Index of Multiple Deprivation (IMD)[9], physical inactivity, district and Clinical Commissioning Group.

Physical activity is measured through Sport England's Active People Survey. The survey forms the benchmark for reporting on physical inactivity and shows that 28% of the Kent population is physically inactive[10]. However, these data are not available at LSOA level and so instead physical inactivity data from Experian Mosaic were used in the analyses.

In order to identify priority areas for action, LSOAs were divided into five groups based on the level of inactivity, with the highest priority given to the most physically inactive populations. Within each priority group, LSOAs were ordered by level of deprivation (most deprived LSOAs listed first) followed by the percentage population meeting accessibility standards (with the lowest percentage population meeting standards listed first).

Recommendations are made for improving access to greenspace based on the priorities.

[8] http://www.ons.gov.uk/ons/guide-method/geography/products/area-classifications/2011-rural-urban/index.html.
[9] https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015.
[10] http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000042/pat/6/ati/102/page/0/par/E12000008/are/E10000016

3. Results covering the District of Canterbury

The results presented here should be interpreted bearing in mind the following important methodological caveats:

- The population defined as active might not be using greenspace for physical activity, using indoor facilities instead (e.g. gyms) or being outdoors but restricting their exercise to built-up areas (e.g. running along residential streets).
- It is likely that the service area method will underestimate greenspace provision in rural locations.
- It is likely that the service area method will increasingly underestimate accessible greenspace provision as ANGSt distances get larger, as access routes excluded roads, assuming that people would travel to a site on foot.
- The ANGSt and DCC standards, as investigated in this report, are met by the first applicable greenspace per postcode. Variation in physical activity could be due to the proximity/accessibility of multiple greenspace, which is not taken into account in these analyses.
- Many other social factors influence the attractiveness of a greenspace as a location for undertaking physical activity, such as people's perceptions of the area (e.g. due to the available facilities, litter, graffiti, fear of crime).

All reported results have been derived using the service area method, unless otherwise stated. Fewer postcodes meet accessibility standards using the service area method when compared to the buffer intersection (Canterbury City Council Report Appendix A) and allocation methods (Canterbury City Council Report Appendix B).

3.1 Populations meeting accessibility standards

Comparisons were made of the results obtained for populations meeting accessibility standards for naturalness level 1, 2 & 3 and naturalness level 1 greenspace (Table 1) using the service area method. These data can be compared with the Kent figures (Canterbury City Council Report Appendix C).

Table 1: Percentage of population in the District of Canterbury meeting accessibility standards.

Greenspace accessibility criteria	Naturalness levels 1, 2 & 3	Naturalness level 1
ANGSt		
At least 1 site >2 ha within 300 m	33% (Figure 2)	16%
At least 1 site >20 ha within 2 km	82% (Figure 3)	81%
At least 1 site >100 ha within 5 km	94% (Figure 4)	93%
At least 1 site >500 ha within 10 km	94% (Figure 5)	94%
DDC standard		
At least 1 site >0.4 ha within 300 m in urban areas or at least 1 site >2 ha within 1 km in rural areas	49% (Figures 6 & 7)	28%

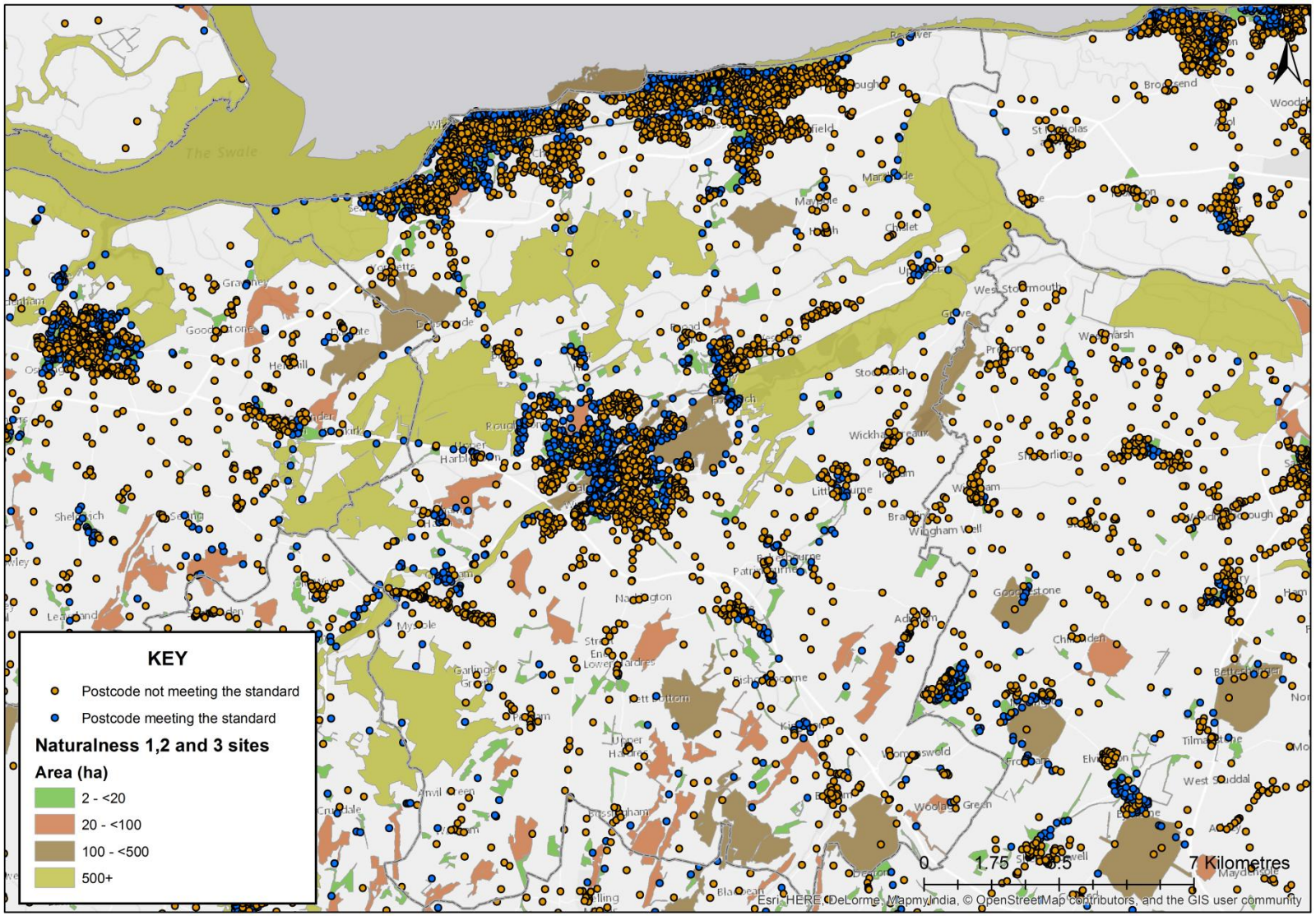

Figure 2: Canterbury District postcodes meeting and not meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m.

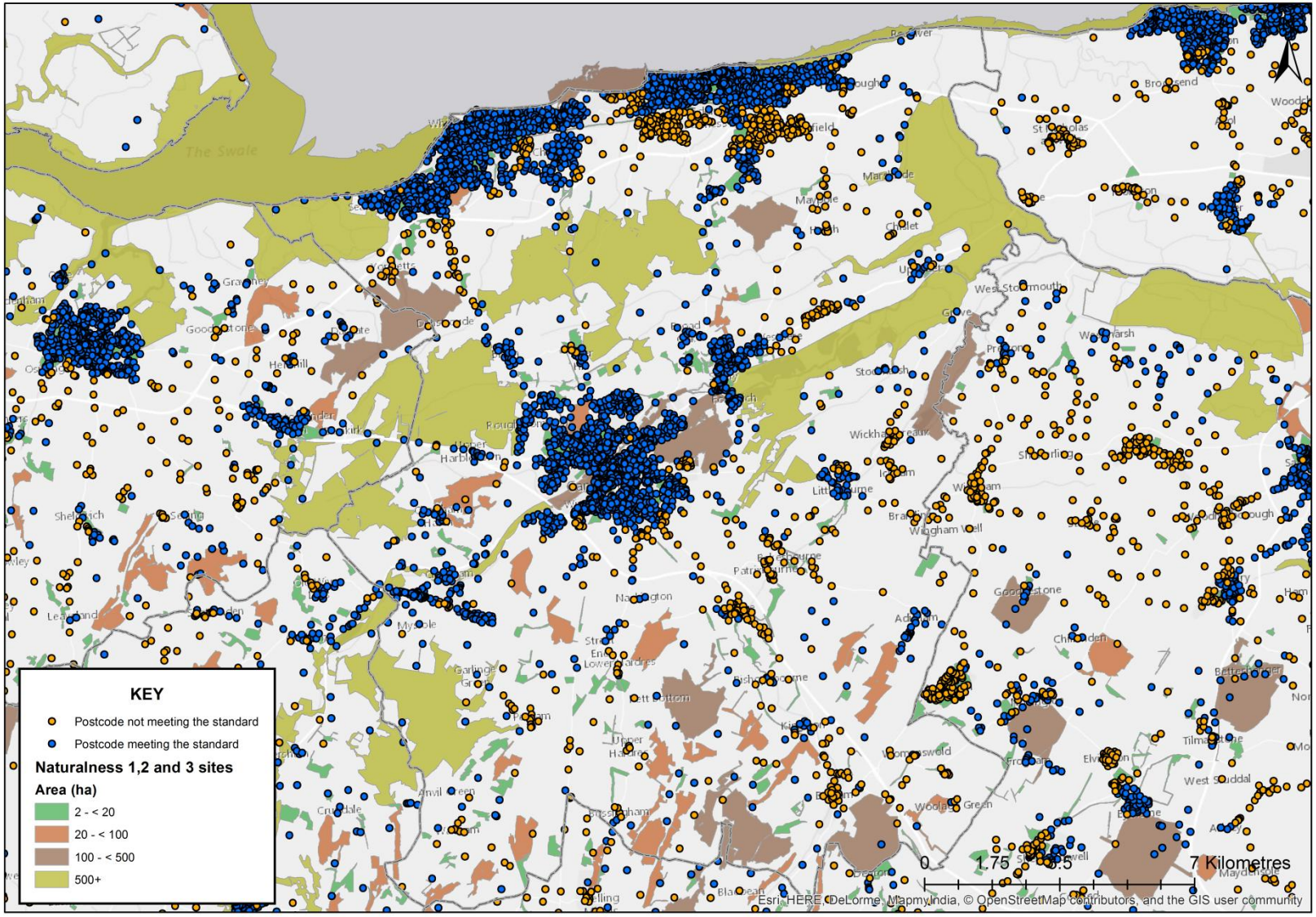

Figure 3: Canterbury District postcodes meeting and <u>not</u> meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 20 ha within 2 km.

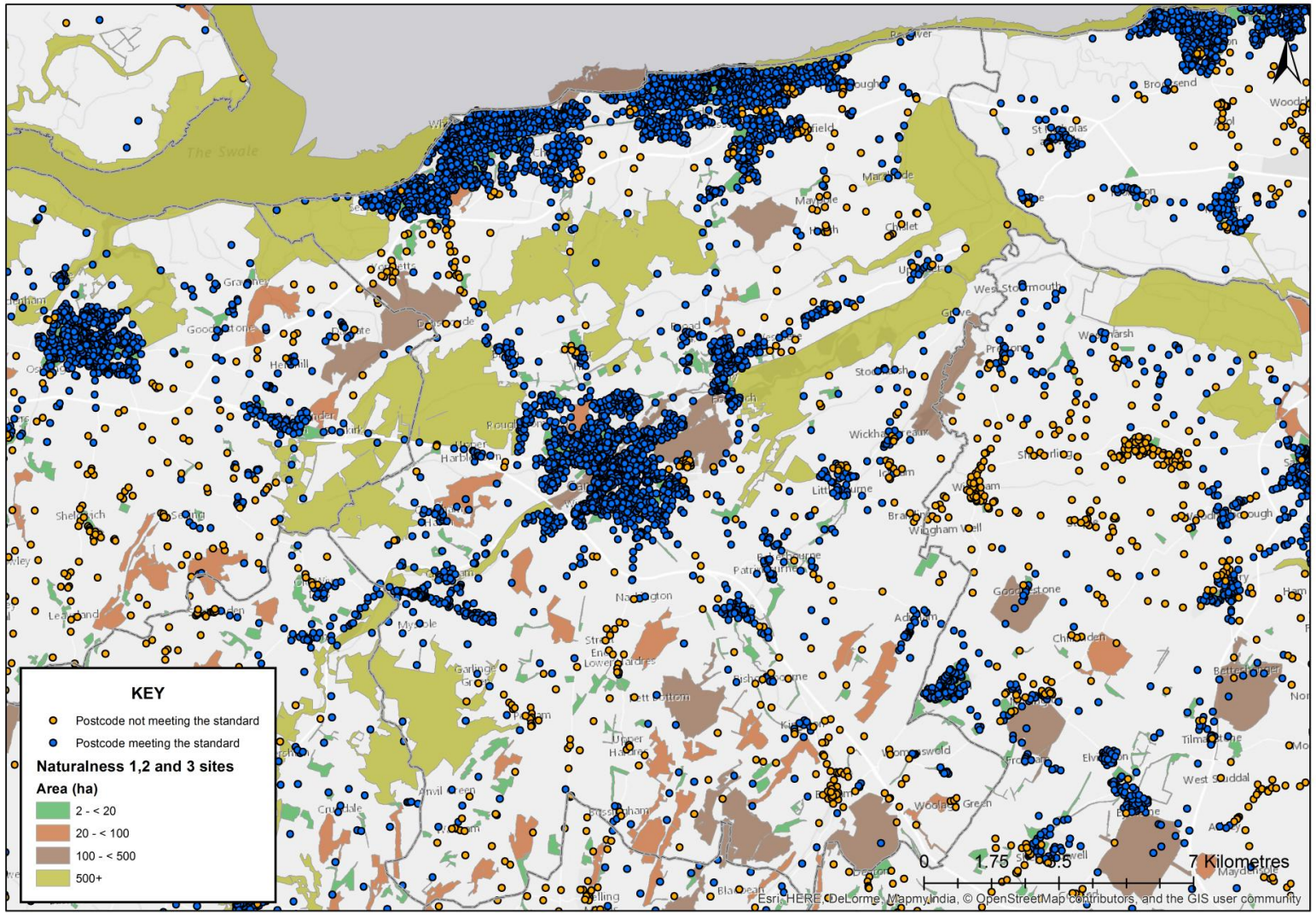

Figure 4: Canterbury District postcodes meeting and not meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 100 ha within 5 km.

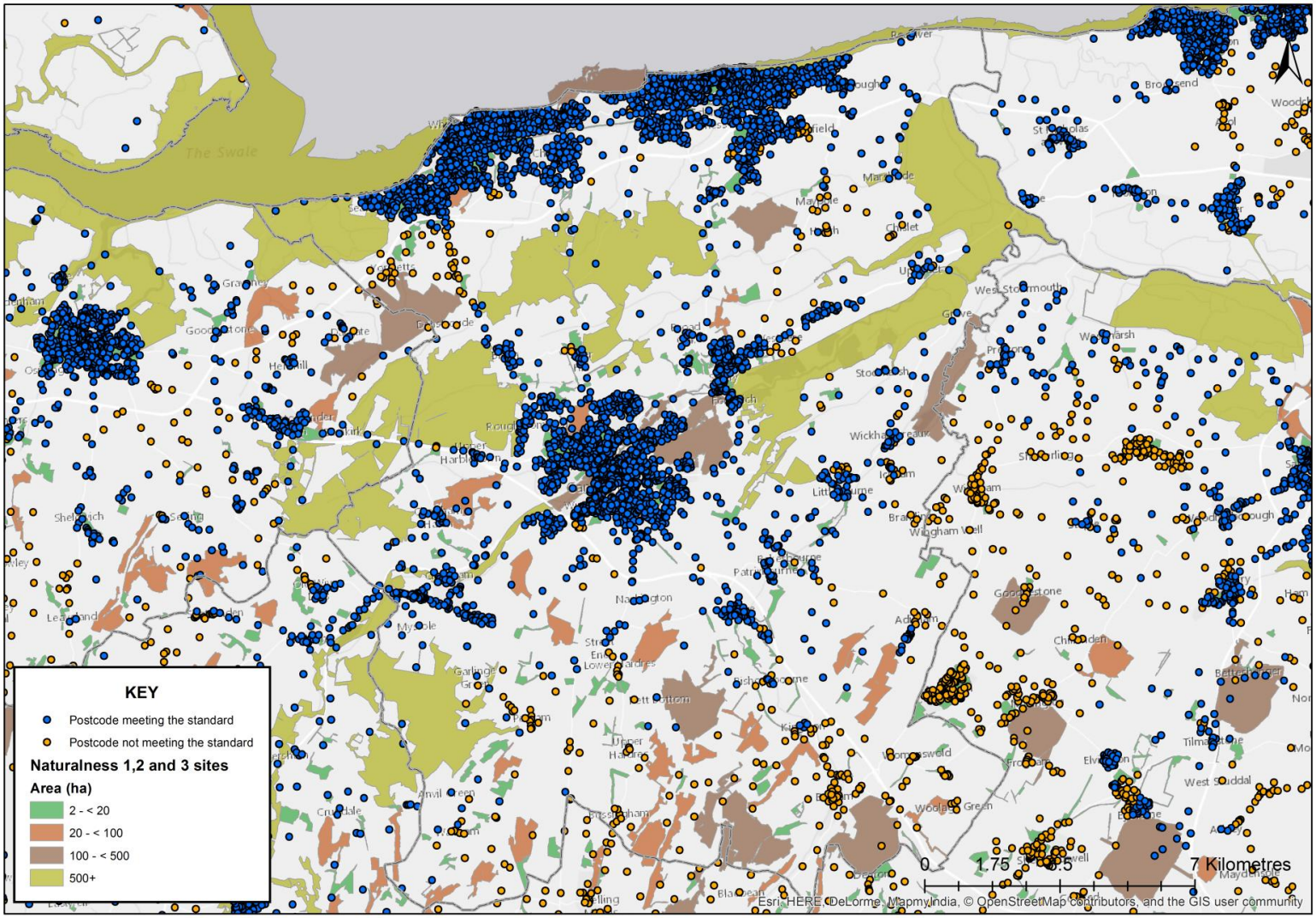

Figure 5: Canterbury District postcodes meeting and not meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 500 ha within 10 km.

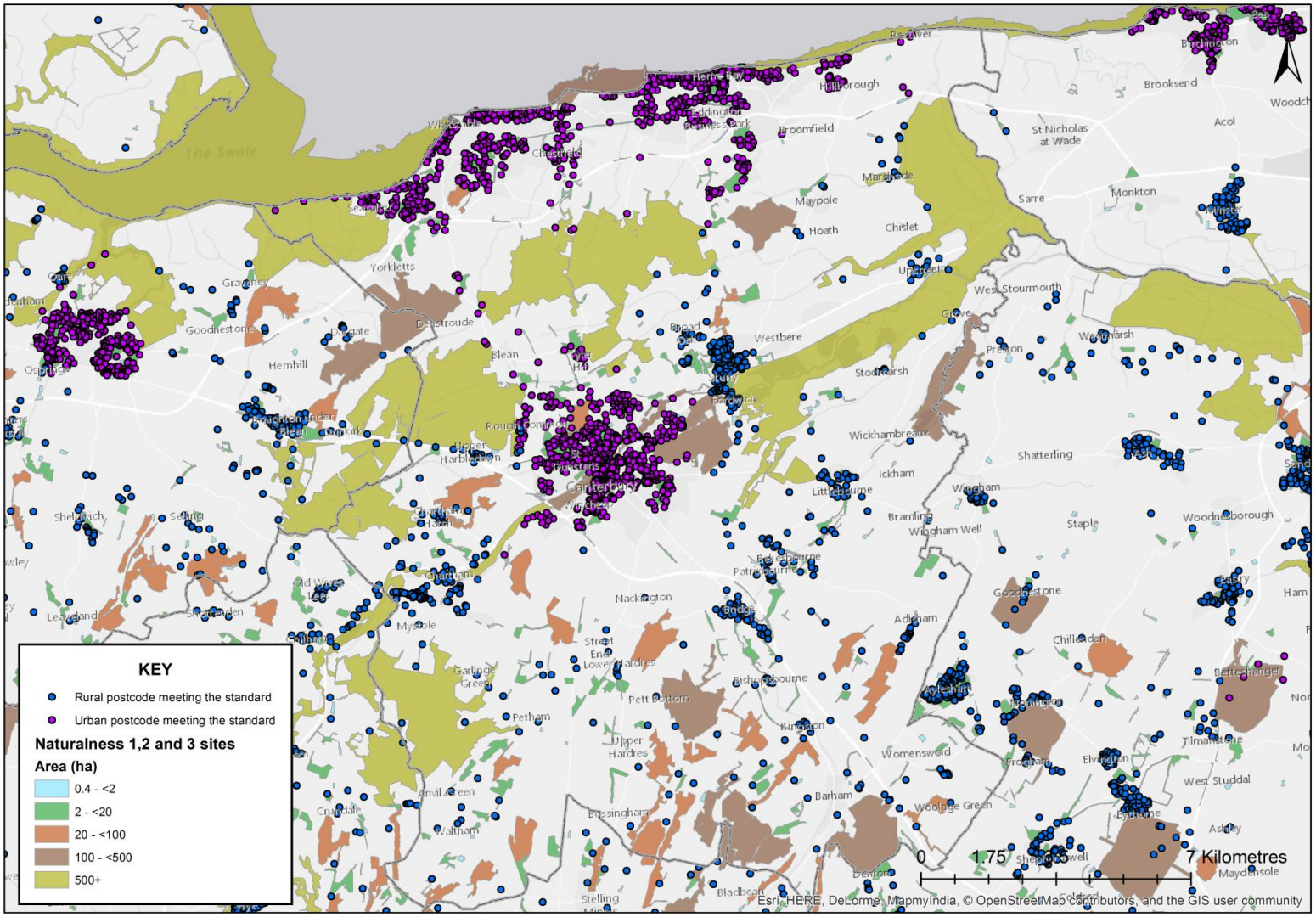

Figure 6: Canterbury District postcodes meeting the DDC standard for naturalness level 1, 2 & 3 greenspace of at least 0.4 ha within 300 m in urban areas or at least 2 ha within 1 km in rural areas.

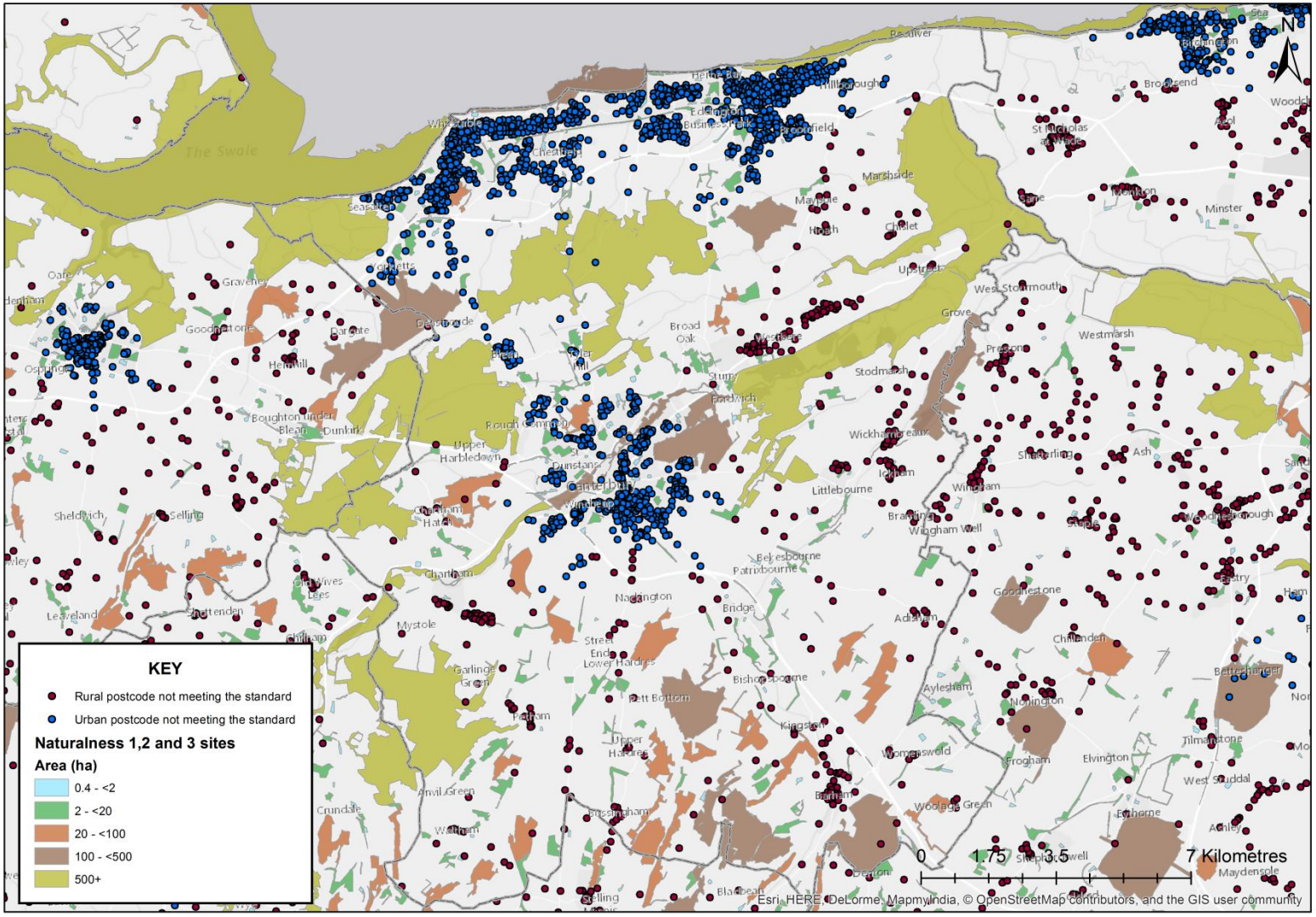

Figure 7: Canterbury District postcodes not meeting the DDC standard for naturalness level 1, 2 & 3 greenspace of at least 0.4 ha within 300 m in urban areas or at least 2 ha within 1 km in rural areas.

3.2 Populations which are physically inactive

The Experian Mosaic data used in this study shows that 23% (based on 2013 population estimates) of the population across the District of Canterbury are considered physically inactive.

4. Prioritisation of areas for action

LSOA populations have been grouped and prioritised according to the proportion that is physically inactive (Table 2 and Canterbury City Council Report Appendix D).

Table 2: Physically inactive priority groupings and reference to matrices for the District of Canterbury.

Priority	Population grouping	Number of LSOAs	Matrix
Physically inactive priority 1	>80% population physically inactive	1	Matrix 1
Physically inactive priority 2	>60% to 80% of the population physically inactive	4	Matrix 2
Physically inactive priority 3	>40% to 60% of the population physically inactive	14	Matrix 3
Physically inactive priority 4	>20% to 40% of the population physically inactive	20	Matrix 4
Physically inactive priority 5	0% to 20% of the population physically inactive	51	Matrix 5

Measures have been proposed for increasing opportunities for physical activity in greenspace across the District of Canterbury associated with each priority (Table 3).

In addition, the results from the analyses and evidence from the literature point to some general actions which could be taken in Canterbury District to improve provision/access to greenspace and encourage physical activity in greenspace:

- Evidence from the scientific literature has shown that people are more likely to visit natural greenspace in close proximity to where they live[11,12,13,]. We therefore propose that priority should be given to increasing accessible greenspace in LSOAs where less than 50% of the population was found to meet ANGSt for greenspace of at least 2 ha within 300 m of home.

[11] Carter, M. and P. Horwitz (2014). "Beyond proximity: the importance of green space useability to self-reported health." *Ecohealth* **11**(3): 322-332.
[12] Dallimer, M., Davies, Z.G., Irvine, K.N., Maltby, L., Warren, P.H., Gaston, K.J. & Armsworth, P.R. (2014) What Personal and Environmental Factors Determine Frequency of Urban Greenspace Use? *International Journal of Environmental Research and Public Health,* 11: 7977-7992.
[13] Giles-Corti, B., Broomhall, M.H., Knuiman, M., Collins, C., Douglas, K., Ng, K., Lange, A. & Donovan, R.J. (2005) Increasing walking: how important is distance to, attractiveness, and size of public open space? *American Journal of Preventative Medicine* **28**(2): 169–176

- Over half (51%) of the population did not meet the DDC accessibility standard (for naturalness level 1, 2 & 3 greenspace of at least 0.4 ha within 300 m of home in urban areas or 2 ha within 1 km in rural areas). In urban LSOAs, where less than 10% of the population met the DDC standard, creation of greenspace of at least 0.4 ha is recommended.
- The percentage of the population that is physically inactive was higher in urban areas across Kent compared to rural. Creation of new greenspace and/or increasing accessibility to existing greenspace in urban compared to rural areas.
- Analyses of data for Kent found a significant relationship was found between physical inactivity and the accessibility of naturalness level 1 greenspace of a least 2 ha within 300 m of where people live in urban areas. Again, creation of new greenspace and/or increasing accessibility to existing greenspace in urban LSOAs should be prioritised over rural LSOAs.
- In some LSOAs the percentage of the population meeting ANGSt for naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m of home was found to be much lower using the service area compared to the buffer intersection method. In these areas we suggest that, where possible, improvements are made to increase access routes to the existing available greenspace.
- In line with other studies we found that populations in Kent who are not active enough for good health are more likely to have higher levels of deprivation. Promoting physical activity outdoors in deprived areas where there is adequate provision of accessible greenspace is recommended.
- High levels of physical inactivity occur despite availability of accessible greenspace (see Matrix 1). In addition to encouraging physical activity in these areas, it is important to identify the barriers stopping people from using their local greenspace for physical activity.
- Some research suggests that people with an existing "orientation" towards nature are more likely to walk or travel to parks and greenspace[14]. Therefore, long-term approaches to increase people's interest in the natural environment should be considered, as a means of encouraging physical activity in greenspace.

[14] Lin BB, Fuller RA, Bush R, Gaston KJ, Shanahan DF (2014) Opportunity or Orientation? Who Uses Urban Parks and Why. PLoS ONE 9(1): e87422. doi:10.1371/journal.pone.0087422

Table 3: Interpretation of the colour coding used in the matrices and proposed measures for increasing opportunities for physical activity in greenspace within 300 m of where people live (and the number of LSOAs in each category in the District of Canterbury to which the interpretation and measures apply).

Naturalness 1, 2 & 3				Naturalness level 1		Interpretation	Primary proposed intervention	Secondary proposed intervention	Number of LSOAs				
Service area		Buffer intersection		Service area	Buffer intersection				Matrix				
ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha				1	2	3	4	5
0% to 10%	0% to 10%					Accessibility to greenspace extremely low 10% or less of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home and less than 10% meet the DDC accessibility standard (greenspace of at least 0.4 ha within 300 m walking distance in urban areas or 2 ha within 1 km in rural areas).	Create new accessible greenspace of at least 0.4 ha within urban LSOAs.	Encourage physical activity in greenspace.	0	0	0	1	6
0% to 10%	0% to 10%	>50%				Accessibility to greenspace extremely low but greenspace present in vicinity 10% or less of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home and less than 10% meet the DDC accessibility standard (greenspace of at least 0.4 ha within 300 m walking distance in urban areas or 2 ha within 1 km in rural areas), but over 50% are	Create new accessible greenspace of at least 0.4 ha within urban LSOAs and, if possible, improve access to existing	Encourage physical activity in greenspace.	0	0	1	0	0

Naturalness 1, 2 & 3				Naturalness level 1		Interpretation	Primary proposed intervention	Secondary proposed intervention	Number of LSOAs				
Service area		Buffer intersection		Service area	Buffer intersection				Matrix				
ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha				1	2	3	4	5
						within a 300 m buffer of such sites.	sites.						
0% to 10%						Accessibility to greenspace very low Less than 10% of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home.	Create new accessible greenspace of at least 2 ha within LSOA.	Encourage physical activity in greenspace.	0	1	2	1	7
0% to 10%		>50%				Accessibility to greenspace very low but greenspace present in vicinity Less than 10% of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home but more than 50% are within a 300 m buffer of such sites.	Create accessible greenspace of at least 2 ha within LSOA and/or, if possible, improve access to existing sites.	Encourage physical activity in greenspace.	0	0	0	1	0
>10% to 50%						Accessibility to greenspace low Between >10% and 50% of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home (service area method).	Create new accessible greenspace of at least 2 ha within LSOA.	Encourage physical activity in greenspace.	0	1	1	1	7

Naturalness 1, 2 & 3				Naturalness level 1		Interpretation	Primary proposed intervention	Secondary proposed intervention	Number of LSOAs				
Service area		Buffer intersection		Service area	Buffer intersection				Matrix				
ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha				1	2	3	4	5
>10% to 50%		>50%				Accessibility to greenspace low but greenspace present in vicinity Between >10% and 50% of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home (service area method) but more than 50% are within a 300 m buffer of such sites.	Create accessible greenspace of at least 2 ha within LSOA and/or, if possible, improve access to existing sites.	Encourage physical activity in greenspace.	1	1	7	14	16
>50% to 90%						Accessibility to greenspace relatively high Between >50% and 90% of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home.	Encourage physical activity in greenspace.	Create more accessible greenspace of at least 2 ha within LSOA.	0	1	3	2	13
>90%						Accessibility to greenspace very high Over 90% of the population has a naturalness level 1, 2 & 3 greenspace of at least 2 ha within 300 m walking distance from home.	Encourage physical activity in greenspace.		0	0	0	0	2

Appendix A: Canterbury District buffer intersection results

Comparisons were made of the results obtained for populations meeting accessibility standards for naturalness level 1, 2 & 3 and naturalness level 1 greenspace (Table A1).

Table A1: Percentage of population in District of Canterbury meeting accessibility standards using the buffer intersection method.

Greenspace accessibility criteria	Naturalness levels 1, 2 & 3	Naturalness level 1
ANGSt		
At least 1 site >2 ha within 300 m	63%	39%
At least 1 site >20 ha within 2 km	100%	100%
At least 1 site >100 ha within 5 km	100%	100%
At least 1 site >500 ha within 10 km	100%	100%
DDC standard		
At least 1 site >0.4 ha within 300 m in urban areas or at least 1 site >2 ha within 1 km in rural areas	82%	60%

Appendix B: Canterbury District allocation results

Comparisons were made of the results obtained for populations meeting ANGSt for naturalness level 1, 2 & 3 and naturalness level 1 greenspace (Table B2).

Table B2: Percentage of population in the District of Canterbury meeting accessibility standards using the allocation method.

Greenspace accessibility criteria	Naturalness levels 1, 2 & 3	Naturalness level 1
ANGSt		
At least 1 site >2 ha within 300 m	56%	31%
At least 1 site >20 ha within 2 km	100%	100%
At least 1 site >100 ha within 5 km	100%	100%
At least 1 site >500 ha within 10 km	100%	100%

Appendix C: Population across Kent meeting accessibility standards

Kent data using the service area method (Table C1) provided for comparison with Canterbury District data.

Table C1: Percentage of population in Kent meeting accessibility standards using the service area method.

Greenspace accessibility criteria	Naturalness levels 1, 2 & 3	Naturalness level 1
ANGSt		
At least 1 site >2 ha within 300 m	34% (Figures 9 & 10)	15%
At least 1 site >20 ha within 2 km	72% (Figures 11 & 12)	64%
At least 1 site >100 ha within 5 km	85% (Figures 13 & 14)	79%
At least 1 site >500 ha within 10 km	46% (Figures 15 & 16)	44%
DDC standard		
At least 1 site >0.4 ha within 300 m in urban areas or at least 1 site >2 ha within 1 km in rural areas	56% (Figures 17 & 18)	27%

Appendix D: Canterbury District prioritisation matrices 1, 2, 3, 4 & 5

Canterbury District Matrix 1: More than 80% of the population with prevalence for physically inactivity – 1 LSOA.

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024061	Canterbury 007B	Gorrell	Canterbury & Coastal CCG	Canterbury	Urban city and town	1	44%	44%	93%	93%	31%	63%

Canterbury District Matrix 2: More than 60% and less than or equal to 80% of the population with prevalence for physical inactivity – 4 LSOAs.

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024119	Canterbury 004D	West Bay	Canterbury & Coastal CCG	Canterbury	Urban city and town	2	0%	29%	50%	63%	0%	0%
E01024066	Canterbury 003B	Greenhill and Eddington	Canterbury & Coastal CCG	Canterbury	Urban city and town	2	16%	16%	26%	26%	0%	0%
E01024059	Canterbury 004A	Chestfield and Swalecliffe	Canterbury & Coastal CCG	Canterbury	Urban city and town	2	55%	64%	97%	97%	29%	71%
E01024105	Canterbury 009B	Seasalter	Canterbury & Coastal CCG	Canterbury	Urban city and town	7	36%	67%	79%	100%	12%	43%

Canterbury District Matrix 3: More than 40% and less than or equal to 60% of the population with prevalence for physical inactivity – 14 LSOAs.

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024128	Canterbury 019A	Wincheap	Canterbury & Coastal CCG	Canterbury	Urban city and town	2	7%	12%	40%	60%	4%	36%
E01024108	Canterbury 009D	Seasalter	Canterbury & Coastal CCG	Canterbury	Urban city and town	2	68%	68%	100%	100%	25%	98%
E01024083	Canterbury 003D	Heron	Canterbury & Coastal CCG	Canterbury	Urban city and town	3	82%	82%	100%	100%	15%	76%
E01024120	Canterbury 004E	West Bay	Canterbury & Coastal CCG	Canterbury	Urban city and town	4	21%	49%	88%	100%	18%	56%
E01024118	Canterbury 003E	West Bay	Canterbury & Coastal CCG	Canterbury	Urban city and town	4	37%	64%	80%	85%	2%	13%
E01024096	Canterbury 002B	Reculver	Canterbury & Coastal CCG	Canterbury	Urban city and town	6	4%	21%	34%	55%	0%	15%
E01024079	Canterbury 003C	Heron	Canterbury & Coastal CCG	Canterbury	Urban city and town	6	45%	55%	66%	92%	21%	26%
E01024117	Canterbury 004C	West Bay	Canterbury & Coastal CCG	Canterbury	Urban city and town	6	67%	67%	79%	83%	12%	22%
E01024073	Canterbury 006A	Herne and Broomfield	Canterbury & Coastal CCG	Canterbury	Urban city and town	7	17%	17%	57%	57%	0%	0%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024097	Canterbury 002C	Reculver	Canterbury & Coastal CCG	Canterbury	Urban city and town	7	20%	20%	36%	36%	0%	27%
E01024106	Canterbury 008E	Seasalter	Canterbury & Coastal CCG	Canterbury	Urban city and town	8	18%	36%	58%	75%	0%	22%
E01024055	Canterbury 007A	Chestfield and Swalecliffe	Canterbury & Coastal CCG	Canterbury	Urban city and town	8	34%	53%	70%	70%	0%	0%
E01024115	Canterbury 005E	Tankerton	Canterbury & Coastal CCG	Canterbury	Urban city and town	9	9%	9%	68%	68%	0%	0%
E01024116	Canterbury 007E	Tankerton	Canterbury & Coastal CCG	Canterbury	Urban city and town	9	45%	48%	69%	92%	9%	38%

Canterbury District Matrix 4: More than 20% and less than or equal to 40% of the population with prevalence for physical inactivity – 20 LSOAs.

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024091	Canterbury 011A	Northgate	Canterbury & Coastal CCG	Canterbury	Urban city and town	1	46%	87%	96%	100%	26%	88%
E01024081	Canterbury 001C	Heron	Canterbury & Coastal CCG	Canterbury	Urban city and town	1	64%	98%	95%	100%	0%	0%
E01024126	Canterbury 020E	Westgate	Canterbury & Coastal CCG	Canterbury	Urban city and town	2	0%	57%	30%	82%	0%	30%
E01024093	Canterbury 014E	Northgate	Canterbury & Coastal CCG	Canterbury	Urban city and town	2	13%	36%	73%	100%	13%	73%
E01024047	Canterbury 014A	Barton	Canterbury & Coastal CCG	Canterbury	Urban city and town	2	35%	43%	85%	85%	10%	56%
E01024049	Canterbury 014B	Barton	Canterbury & Coastal CCG	Canterbury	Urban city and town	2	40%	40%	85%	85%	0%	18%
E01024111	Canterbury 011C	Sturry North	Canterbury & Coastal CCG	Canterbury	Rural town and fringe	3	21%	82%	67%	100%	21%	67%
E01024075	Canterbury 006C	Herne and Broomfield	Canterbury & Coastal CCG	Canterbury	Urban city and town	4	32%	43%	51%	84%	1%	1%
E01024065	Canterbury 004B	Greenhill and Eddington	Canterbury & Coastal CCG	Canterbury	Urban city and town	5	21%	29%	68%	68%	0%	0%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024094	Canterbury 002A	Reculver	Canterbury & Coastal CCG	Canterbury	Urban city and town	5	26%	51%	55%	94%	28%	54%
E01024110	Canterbury 011B	Sturry North	Canterbury & Coastal CCG	Canterbury	Rural town and fringe	5	45%	93%	57%	100%	45%	57%
E01024127	Canterbury 017D	Wincheap	Canterbury & Coastal CCG	Canterbury	Urban city and town	6	13%	37%	42%	58%	13%	42%
E01024060	Canterbury 008A	Gorrell	Canterbury & Coastal CCG	Canterbury	Urban city and town	7	11%	11%	55%	55%	11%	44%
E01024109	Canterbury 009E	Seasalter	Canterbury & Coastal CCG	Canterbury	Urban city and town	7	36%	54%	86%	96%	2%	57%
E01024098	Canterbury 002D	Reculver	Canterbury & Coastal CCG	Canterbury	Urban city and town	8	3%	3%	9%	9%	3%	9%
E01024057	Canterbury 005B	Chestfield and Swalecliffe	Canterbury & Coastal CCG	Canterbury	Urban city and town	8	15%	20%	62%	89%	0%	10%
E01024045	Canterbury 016B	Barton	Canterbury & Coastal CCG	Canterbury	Urban city and town	8	31%	31%	59%	59%	0%	1%
E01024112	Canterbury 011D	Sturry South	Canterbury & Coastal CCG	Canterbury	Rural town and fringe	9	10%	70%	64%	100%	10%	64%
E01024114	Canterbury 005D	Tankerton	Canterbury & Coastal CCG	Canterbury	Urban city and town	10	39%	43%	79%	94%	12%	43%
E01024068	Canterbury 012D	Harbledown	Canterbury & Coastal CCG	Canterbury	Urban city and town	10	54%	65%	69%	72%	43%	48%

Canterbury District Matrix 5: 0% to 20% of the population with prevalence for physical inactivity – 51 LSOAs.

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
E01024078	Canterbury 001A	Heron	Canterbury & Coastal CCG	Canterbury	Urban city and town	2	20%	52%	75%	98%	0%	0%
E01024080	Canterbury 001B	Heron	Canterbury & Coastal CCG	Canterbury	Urban city and town	2	65%	68%	76%	76%	30%	59%
E01024103	Canterbury 013E	St Stephens	Canterbury & Coastal CCG	Canterbury	Urban city and town	3	34%	36%	82%	93%	9%	52%
E01024092	Canterbury 014D	Northgate	Canterbury & Coastal CCG	Canterbury	Urban city and town	3	37%	79%	83%	100%	39%	83%
E01024099	Canterbury 013A	St Stephens	Canterbury & Coastal CCG	Canterbury	Urban city and town	4	0%	75%	38%	100%	0%	38%
E01024086	Canterbury 010C	Marshside	Canterbury & Coastal CCG	Canterbury	Rural town and fringe	4	1%	2%	5%	100%	1%	5%
E01024048	Canterbury 016D	Barton	Canterbury & Coastal CCG	Canterbury	Urban city and town	4	8%	81%	14%	100%	2%	8%
E01024042	Canterbury 018A	Barham Downs	Canterbury & Coastal CCG	Canterbury	Rural village and dispersed	4	13%	53%	45%	100%	11%	38%
E01024087	Canterbury 010D	Marshside	Canterbury & Coastal CCG	Canterbury	Rural village and dispersed	4	38%	51%	80%	99%	38%	80%
E01024090	Canterbury	Northgate	Canterbury & Coastal	Canterbury	Urban city and	4	48%	49%	100%	100%	43%	100%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
	014C		CCG		town							
E01032808	Canterbury 020G	Westgate	Canterbury & Coastal CCG	Canterbury	Urban city and town	4	99%	99%	100%	100%	75%	100%
E01024082	Canterbury 001D	Heron	Canterbury & Coastal CCG	Canterbury	Urban city and town	5	19%	19%	41%	41%	10%	41%
E01024095	Canterbury 001E	Reculver	Canterbury & Coastal CCG	Canterbury	Urban city and town	5	34%	34%	50%	50%	0%	20%
E01024122	Canterbury 020C	Westgate	Canterbury & Coastal CCG	Canterbury	Urban city and town	5	49%	76%	74%	86%	0%	5%
E01024072	Canterbury 008D	Harbour	Canterbury & Coastal CCG	Canterbury	Urban city and town	5	57%	57%	90%	90%	35%	65%
E01024069	Canterbury 008B	Harbour	Canterbury & Coastal CCG	Canterbury	Urban city and town	6	1%	1%	13%	46%	1%	13%
E01024052	Canterbury 017A	Chartham and Stone Street	Canterbury & Coastal CCG	Canterbury	Rural town and fringe	6	1%	37%	13%	99%	1%	13%
E01024071	Canterbury 007D	Harbour	Canterbury & Coastal CCG	Canterbury	Urban city and town	6	3%	18%	16%	57%	0%	0%
E01024054	Canterbury 017C	Chartham and Stone Street	Canterbury & Coastal CCG	Canterbury	Rural village and dispersed	6	15%	37%	49%	94%	14%	43%
E01024062	Canterbury 009A	Gorrell	Canterbury & Coastal CCG	Canterbury	Urban city and town	6	23%	24%	76%	78%	2%	42%
E01024084	Canterbury	Little Stour	Canterbury & Coastal	Canterbury	Rural town and	6	30%	55%	85%	100%	14%	29%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
	010A		CCG		fringe							
E01024130	Canterbury 019C	Wincheap	Canterbury & Coastal CCG	Canterbury	Urban city and town	6	38%	51%	79%	81%	7%	10%
E01024070	Canterbury 008C	Harbour	Canterbury & Coastal CCG	Canterbury	Urban city and town	6	50%	71%	70%	88%	47%	66%
E01024124	Canterbury 020D	Westgate	Canterbury & Coastal CCG	Canterbury	Urban city and town	6	63%	64%	97%	99%	63%	97%
E01032807	Canterbury 020F	Westgate	Canterbury & Coastal CCG	Canterbury	Urban city and town	6	90%	92%	97%	99%	59%	93%
E01024131	Canterbury 016E	Wincheap	Canterbury & Coastal CCG	Canterbury	Urban city and town	7	6%	6%	19%	19%	0%	0%
E01024058	Canterbury 005C	Chestfield and Swalecliffe	Canterbury & Coastal CCG	Canterbury	Urban city and town	7	22%	30%	51%	69%	0%	0%
E01024064	Canterbury 003A	Greenhill and Eddington	Canterbury & Coastal CCG	Canterbury	Urban city and town	7	30%	51%	67%	87%	7%	29%
E01024101	Canterbury 013C	St Stephens	Canterbury & Coastal CCG	Canterbury	Urban city and town	7	35%	59%	66%	100%	17%	66%
E01024121	Canterbury 020B	Westgate	Canterbury & Coastal CCG	Canterbury	Urban city and town	7	45%	100%	89%	100%	11%	25%
E01024129	Canterbury 019B	Wincheap	Canterbury & Coastal CCG	Canterbury	Urban city and town	7	52%	52%	100%	100%	36%	57%
E01024067	Canterbury	Harbledown	Canterbury & Coastal	Canterbury	Rural village and	7	63%	87%	87%	100%	60%	87%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
	012C		CCG		dispersed							
E01024076	Canterbury 006D	Herne and Broomfield	Canterbury & Coastal CCG	Canterbury	Urban city and town	8	0%	4%	0%	32%	0%	0%
E01024044	Canterbury 016A	Barton	Canterbury & Coastal CCG	Canterbury	Urban city and town	8	9%	30%	32%	62%	0%	0%
E01024043	Canterbury 018B	Barham Downs	Canterbury & Coastal CCG	Canterbury	Rural village and dispersed	8	19%	29%	57%	100%	7%	44%
E01024085	Canterbury 010B	Little Stour	Canterbury & Coastal CCG	Canterbury	Rural village and dispersed	8	23%	54%	48%	83%	18%	41%
E01024053	Canterbury 017B	Chartham and Stone Street	Canterbury & Coastal CCG	Canterbury	Rural village and dispersed	8	29%	65%	45%	99%	27%	43%
E01024077	Canterbury 006E	Herne and Broomfield	Canterbury & Coastal CCG	Canterbury	Urban city and town	8	53%	46%	77%	77%	24%	54%
E01024089	Canterbury 018D	North Nailbourne	Canterbury & Coastal CCG	Canterbury	Rural village and dispersed	8	53%	89%	95%	100%	41%	78%
E01024113	Canterbury 011E	Sturry South	Canterbury & Coastal CCG	Canterbury	Rural town and fringe	8	64%	94%	100%	100%	64%	100%
E01024063	Canterbury 007C	Gorrell	Canterbury & Coastal CCG	Canterbury	Urban city and town	8	65%	75%	100%	100%	0%	0%
E01024074	Canterbury 006B	Herne and Broomfield	Canterbury & Coastal CCG	Canterbury	Urban city and town	9	0%	0%	6%	26%	0%	0%
E01024107	Canterbury	Seasalter	Canterbury & Coastal	Canterbury	Urban city and	9	2%	29%	43%	92%	2%	43%

LSOA reference	Kent LSOA name	Ward name	CCG	Local Authority	Rural-Urban	IMD decile	Naturalness 1, 2 & 3				Naturalness level 1	
							Service area		Buffer intersection		Service area	Buffer intersection
							ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	DDC: % population within urban-rural standard	ANGSt: % population within 300 m of >2 ha	ANGSt: % population within 300 m of >2 ha
	009C		CCG		town							
E01024056	Canterbury 005A	Chestfield and Swalecliffe	Canterbury & Coastal CCG	Canterbury	Urban city and town	9	9%	37%	27%	76%	9%	27%
E01024088	Canterbury 018C	North Nailbourne	Canterbury & Coastal CCG	Canterbury	Rural town and fringe	9	16%	91%	52%	100%	14%	52%
E01024100	Canterbury 013B	St Stephens	Canterbury & Coastal CCG	Canterbury	Urban city and town	9	20%	70%	24%	98%	17%	21%
E01024123	Canterbury 012E	Westgate	Canterbury & Coastal CCG	Canterbury	Urban city and town	9	78%	78%	100%	100%	7%	52%
E01024104	Canterbury 020A	St Stephens	Canterbury & Coastal CCG	Canterbury	Urban city and town	9	79%	85%	94%	100%	41%	64%
E01024046	Canterbury 016C	Barton	Canterbury & Coastal CCG	Canterbury	Urban city and town	10	0%	0%	24%	24%	0%	7%
E01032809	Canterbury 012F	Blean Forest	Canterbury & Coastal CCG	Canterbury	Urban city and town	10	62%	62%	92%	92%	61%	92%
E01024102	Canterbury 013D	St Stephens	Canterbury & Coastal CCG	Canterbury	Urban city and town	10	75%	76%	98%	100%	39%	76%