

ASHFORD

National Child Measurement Programme: Further Analysis of the Drivers of Excess Weight

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Produced by

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| 1. Background

This paper provides a high level summary of the results of in-depth analyses exploring the drivers of excess weight among reception and year six children, a [full report](#) has been published.

The following analyses of local childhood weight data have also been produced:

- Local authority level [trend analysis of data up to 2015/16](#), with comparisons to Kent, the South East and England.
- Kent [analysis of the inequalities](#) in childhood obesity.

The above analyses have established that overweight and obesity prevalence is higher in children resident within areas of deprivation. Further, there is evidence for a widening gap in obesity prevalence between the most and the least deprived groups across Kent during 2008/09 to 2014/15.

The following paragraphs summarise the key findings from the [full report](#). Maps have also been presented for the LSOAs in Ashford with the highest levels of excess weight¹ across Kent.

¹ defined as the upper quartile of excess weight across Kent between 2008/09 to 2014/15

| 2. Ethnicity

The association between deprivation and high levels of obesity and excess weight in childhood is well documented. There is also a strong body of evidence indicating that certain ethnic groups are at greater risk of excess weight.

Our analysis used statistical methods to enable comparison to White children and demonstrated **higher odds of excess weight among:**

- **Black children** within reception year in Kent
- **Black, Asian and Other² children** within year six in Kent

This remained even after accounting for deprivation.

We were able to show that the strength of the association between excess weight and Black populations varies across localities in Kent. The [full report](#) details the statistical methods used.

This identifies areas where:

- the **association** between black ethnicity and excess weight is **strong**
- and there is a **high** concentration of **black** individuals within the **population**.

KEY FOCUS:

Identifying these areas may help the effective targeting of public health interventions.

² Arab and any other ethnic category

| 3. Living Environment

There is a high level of interest in the influence of the living environment on excess weight. But, unpicking the key features of an obesogenic environment is challenging as the factors that guide food choice and physical activity are complex.

Using appropriate statistical techniques we were able to demonstrate **higher odds of excess weight** for areas with:

- **shorter distances to food outlets (takeaways)**
- **lower access to food supermarkets**

We also found **lower odds of excess weight** for areas with:

- **lower access to greenspace**
- **longer distances to public & private sports facilities**

But, all findings were only before adjustment for deprivation, ethnicity and urban/rural environment.

KEY FOCUS:

Locality mapping of the main assets and vulnerabilities may guide understanding of some of the possible determinants of obesity within the local context.

Table 1: Areas with highest levels of childhood excess weight.

Ward Code	Ward Name	LSOA Code	LSOA Name	IMD Kent weighted quintile	Mind the Gap Type	Upper quartile excess weight
E05004867	Aylesford Green	E01023972	Ashford 006A	1	3	reception
		E01023973	Ashford 005A	1		reception
E05004868	Beaver	E01023974	Ashford 007A	1		year six
		E01023975	Ashford 007B	1		reception
		E01023976	Ashford 008A	1		year six
		E01023977	Ashford 007C	3		reception
E05004870	Bockhanger	E01023980	Ashford 004A	3		year six
		E01023981	Ashford 004B	2		reception
E05004872	Bybrook	E01023983	Ashford 003A	4		year six
E05004873	Charing	E01023986	Ashford 002B	3		year six
E05004874	Downs North	E01023987	Ashford 001B	3		reception
E05004876	Godinton	E01023993	Ashford 004F	5		reception
E05004877	Great Chart with Singleton North	E01032813	Ashford 012E	5		year six
		E01032814	Ashford 012F	3		year six
E05004878	Highfield	E01023996	Ashford 006C	5		reception
E05004882	Norman	E01024001	Ashford 009A	1		reception/ year six
		E01024002	Ashford 005B	2		reception/ year six
E05004883	North Willesborough	E01024004	Ashford 006E	4		reception
		E01024005	Ashford 006F	3		reception
E05004885	Park Farm South	E01024006	Ashford 009B	5		year six
E05004886	Rolvenden & Tenterden West	E01024010	Ashford 013B	2		reception/ year six
E05004891	Stanhope	E01024019	Ashford 008B	1	3	reception
		E01024020	Ashford 008C	1	3	reception/ year six
E05004892	Stour	E01024022	Ashford 004H	3		reception/ year six
		E01024023	Ashford 005C	3		year six
E05004894	Tenterden South	E01024025	Ashford 013F	2		reception

Ward Code	Ward Name	LSOA Code	LSOA Name	IMD Kent weighted quintile	Mind the Gap Type	Upper quartile excess weight
E05004895	Victoria	E01024027	Ashford 005D	2	3	year six
		E01024028	Ashford 007F	1		reception/ year six
E05004897	Weald Central	E01024033	Ashford 002E	2		year six
E05004899	Weald North	E01024036	Ashford 011D	3		reception/ year six
E05004900	Weald South	E01024038	Ashford 012C	3		reception
		E01024039	Ashford 012D	2		reception/ year six

WARDS:

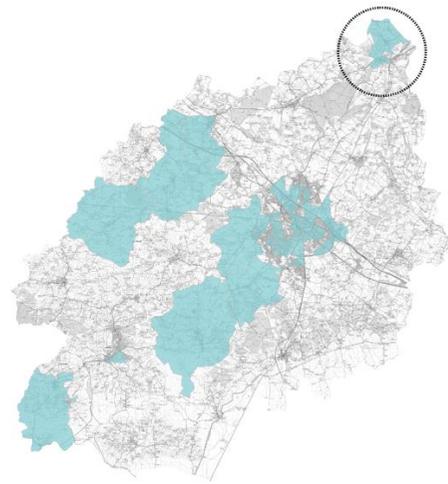
- Downs North,
Not in the most deprived decile.

ETHNICITY:

The association between black ethnicity and excess weight was **strong** for year six excess weight.

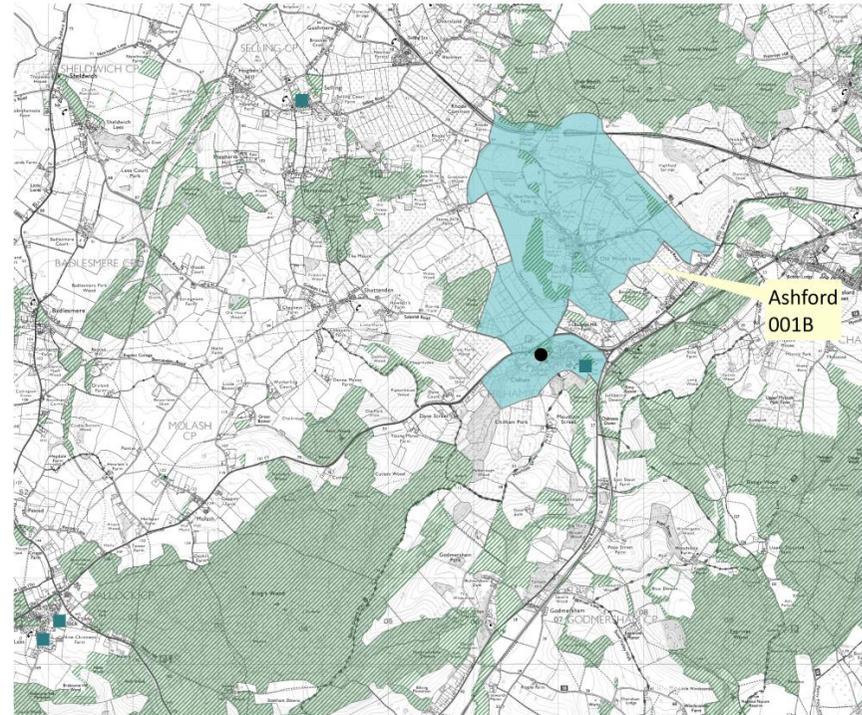
Not an area with high concentrations of black individuals within the population.

The living environment: further analysis of the drivers of excess weight.



Ashford

- ▨ Greenspace
- Food outlet
- Public & private sports facility
- ▲ Supermarket



Source: OS, produced by KPHO (ZC) April 2017

THE LIVING ENVIRONMENT:

- Rural and urban classification is Village.
- Some evidence for lower access to supermarkets, driven by greater distance to nearest supermarket.
- Less than 50% of the population with access to greenspace.

WARDS:

- Charing,
- Weald Central,
- Weald North,

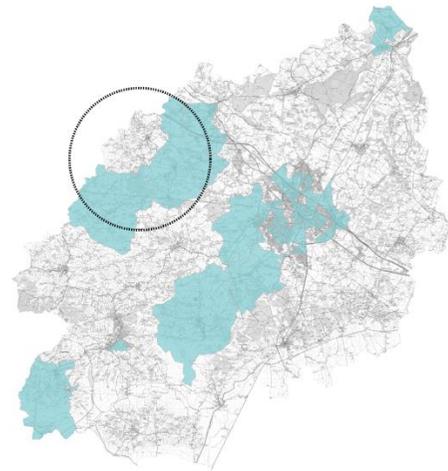
Not in the most deprived decile.

ETHNICITY:

The association between black ethnicity and excess weight was **strong**.

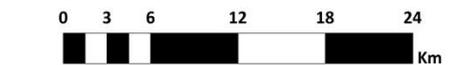
Not an area with high concentration of black individuals in the population.

The living environment: further analysis of the drivers of excess weight.



Ashford

- ▨ Greenspace
- Food outlet
- Public & private sports facility
- ▲ Supermarket



Source: OS, produced by KPHO (ZC) April 2017

Note: LSOAs 002B, 002E & 011D are in Charing, Weald Central & Weald North ward respectively

THE LIVING ENVIRONMENT:

- Rural and urban classification is Village and Town & Fringe.
- Some evidence for lower access to supermarkets, driven by greater distance to nearest supermarket.
- Less than 50% of the population with access to greenspace.
- Smaller distances to nearest food outlet in Charing ward.

WARDS:

- Rolvenden & Tenterden West,
- Tenterden South,

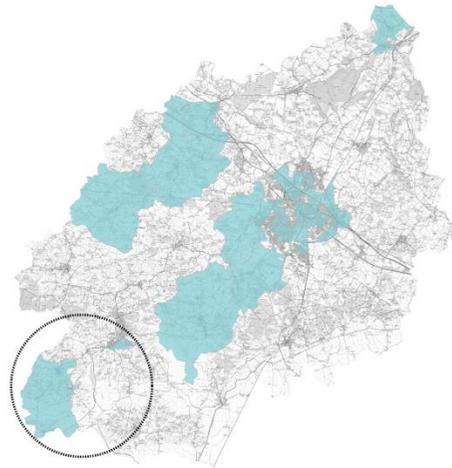
Not in the most deprived decile.

ETHNICITY:

The association between black ethnicity and excess weight was **weak**.

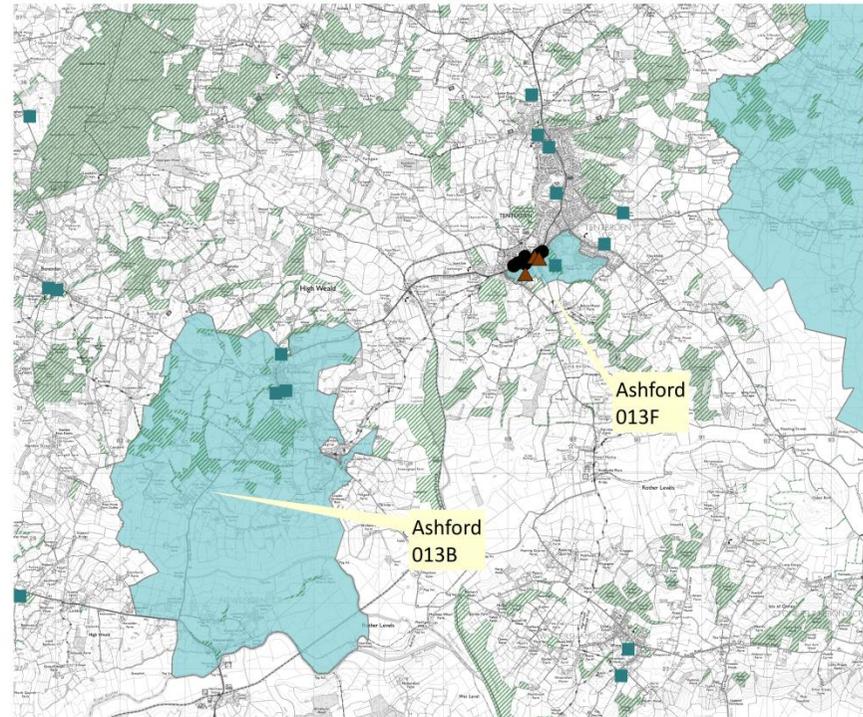
Not an area with high concentration of black individuals in the population.

The living environment: further analysis of the drivers of excess weight.



Ashford

- ▨ Greenspace
- Food outlet
- Public & private sports facility
- ▲ Supermarket



0 3 6 12 18 24 Km

Source: OS, produced by KPHO (ZC) April 2017

THE LIVING ENVIRONMENT:

- Rural and urban classification is Village, as well as, Town & Fringe in the LSOA closer to Tenterden town.
- Lower access to supermarkets in Rolvenden & Tenterden West ward, driven by greater distance to nearest supermarket.
- Less than 50% of the population with access to greenspace, but generally smaller distances to nearest public & private sports facility.
- Smaller distances to nearest food outlet in LSOA closer to Tenterden town.

WARDS:

- Great Chart with Singleton North
- Weald South

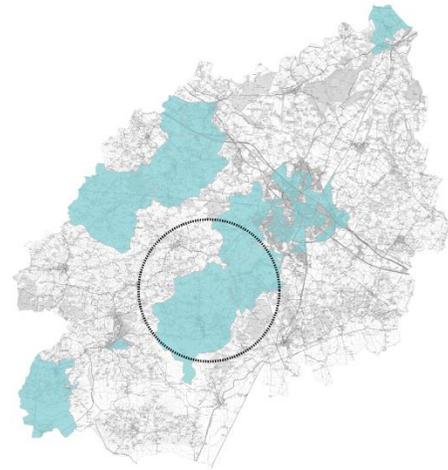
Not in the most deprived decile.

ETHNICITY:

The association between black ethnicity and excess weight was **weak**.

Parts of **Great Chart with Singleton North*** have a high concentration of black individuals in the population.

The living environment: further analysis of the drivers of excess weight.

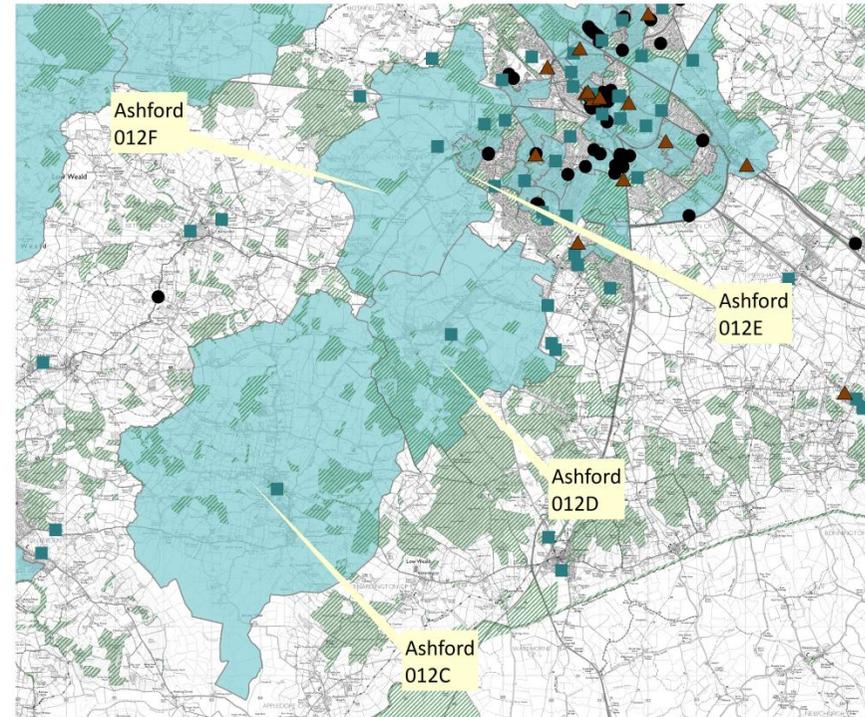


Ashford

- Greenspace
- Food outlet
- Public & private sports facility
- ▲ Supermarket

* LSOA 012E

Note: 012E & 012F are within Great Chart with Singleton North. 012C & 012D are within Weald South



0 3 6 12 18 24 Km
Source: OS, produced by KPHO (ZC) April 2017

THE LIVING ENVIRONMENT:

- Rural and urban classification is Village within Weald South, whereas, Urban within Great Chart with Singleton North.
- Some evidence for lower access to supermarkets within parts of Weald South ward.
- Good population with access to greenspace within Great Chart with Singleton North, however, not in the Weald South ward.
- Smaller distances to nearest food outlet in LSOA closer to Ashford town.

WARDS:

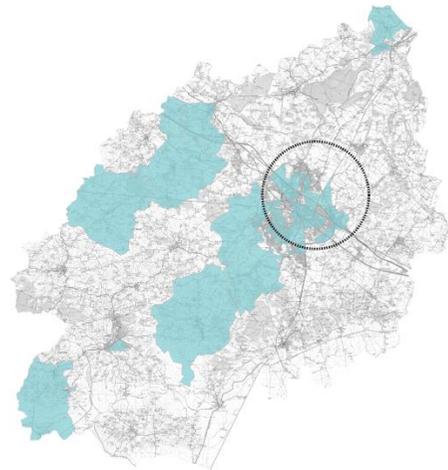
- Aylesford,
- Bockhanger
- Bybrook
- Highfield
- North Willesborough
- Stour

Parts of Aylesford* in most deprived decile Type 3

ETHNICITY:

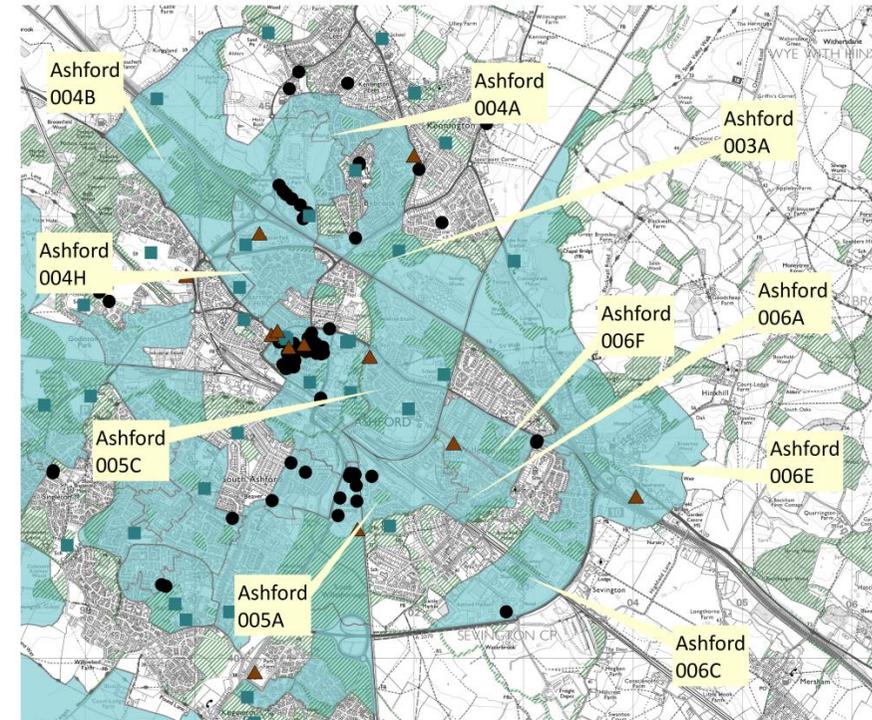
The association between black ethnicity and excess weight was **weak**, although there are high concentrations of black individuals in the population.

The living environment: further analysis of the drivers of excess weight.



Ashford

- ▨ Greenspace
- Food outlet
- Public & private sports facility
- ▲ Supermarket



Source: OS, produced by KPHO (ZC) April 2017

*LSOAs 004A in Bockhanger & 004H in Stour

THE LIVING ENVIRONMENT:

- Rural and urban classification is Urban.
- No evidence for lower access to supermarkets in any parts of this area.
- Generally good access to greenspace, except for Bybrook and parts of Bockhanger & Stour*.
- Generally within 1200m of nearest food outlet.

WARDS:

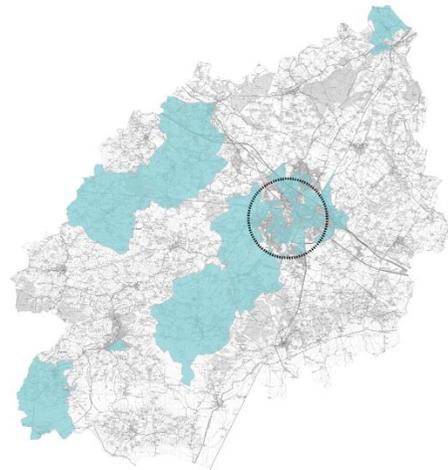
- Beaver,
- Godington,
- Norman,
- Stanhope,
- Park Farm South,
- Victoria

Parts of **Stanhope & Victoria*** in most deprived decile Type 3

ETHNICITY:

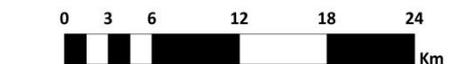
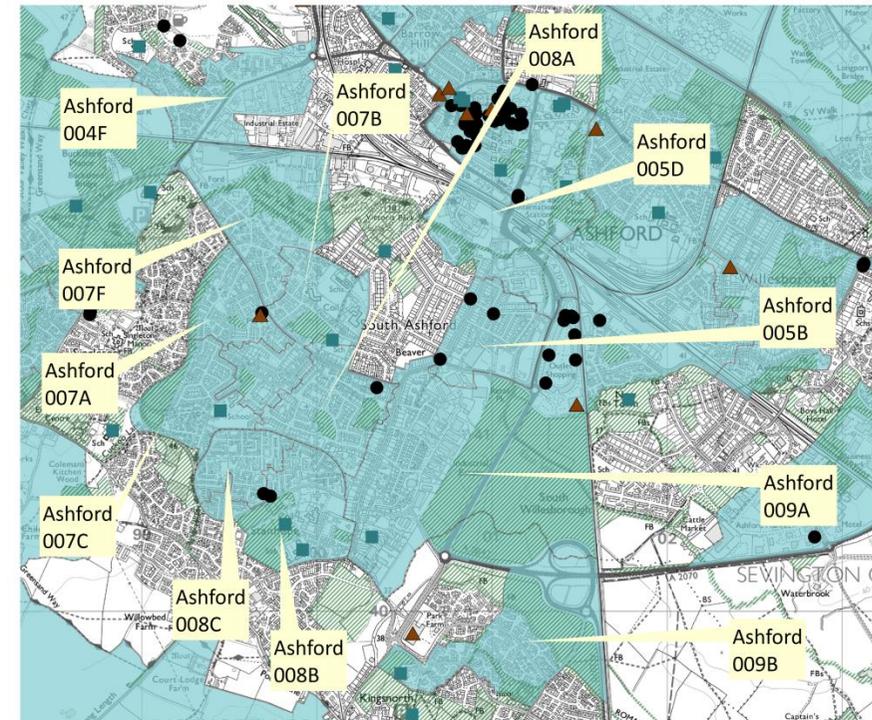
The association between black ethnicity and excess weight was **weak**, although there are high concentrations of black individuals in the population.

The living environment: further analysis of the drivers of excess weight.



Ashford

- ▨ Greenspace
- Food outlet
- Public & private sports facility
- ▲ Supermarket



Source: OS, produced by KPHO (ZC) April 2017

*LSOAs 007F in Victoria & 008B, 008C in Stanhope

THE LIVING ENVIRONMENT:

- Rural and urban classification is Urban.
- Some evidence for lower access to supermarkets in the parts of Stanhope & Victoria* wards in the most deprived decile.
- Generally moderate access to greenspace, except for Godington ward.
- Generally within 1200m of nearest food outlet.

| Appendix A: Indicators Used

Lower super output areas with **high levels of excess weight** defined as:

- upper quartile of overweight or obesity as measured by the National Child Measurement Programme 2008-2014

Geographically weighted regression performed using the following variables:

- percentage overweight or obese as measured by the National Child Measurement Programme 2008-2014
- percentage of total population from a Black ethnic group, all ages, as measured by the 2011 Census

Areas with **high Black ethnic group concentration** have been defined as:

- upper quintile of local authority Black population resident within lower super output area as measured by the 2011 Census

The **living environment variables** used:

- mapping the locations of greenspace, food outlets, public & private sports facilities and supermarkets
- straight line distance from LSOA population weighted centroid to nearest takeaway, with emphasis on takeaways within 1200m
- bottom 25th percentile of index scores for supermarket access, combined using arithmetic mean of:
 - straight line distance from LSOA population weighted centroid to supermarket
 - the percentage of LSOA households with no car access for families with dependent children or lone parents was extracted from the 2011 Census
- LSOAs with less than 50% population access to greenspace
 - 1 site greater than 2ha (using ANGSt naturalness 1,2 & 3) within 300m of where people live
- straight line distance from LSOA population weighted centroid to nearest public & private sports facility, with emphasis on the bottom 10th percentile of distances (roughly equivalent to distances greater than 1km)