

SHEPWAY

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

February 2017



Produced by

Val Miller: Public Health Specialist (Val.Miller@Kent.gov.uk)

Wendy Jeffreys: Public Health Specialist (Wendy.Jeffreys@Kent.gov.uk)

Rachel Kennard: Senior Intelligence Analyst (Rachel.Kennard@kent.gov.uk)

Zara Cuccu: Public Health Analyst (Zara.Cuccu@Kent.gov.uk)

Correspondence to: Zara Cuccu



Version: 01

Last Updated: February 2017

| 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 Shepway 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
E05005034	Dymchurch & St Mary's Bay	E01024486	Shepway 011A	2		year six
		E01024487	Shepway 011B	2		year six
		E01024488	Shepway 011C	2		reception
		E01024489	Shepway 009A	2		year six
E05005036	Folkestone Cheriton	E01024491	Shepway 005A	3		year six
		E01024493	Shepway 005B	2		year six
		E01024494	Shepway 005C	2		year six
		E01024495	Shepway 005D	2		reception/ year six
E05005037	Folkestone East	E01024497	Shepway 003B	1		reception
		E01024498	Shepway 003C	1	3	reception/ year six
E05005038	Folkestone Foord	E01024500	Shepway 004B	1	3	reception/ year six
		E01024501	Shepway 004C	1		year six
		E01024502	Shepway 004D	1		year six
E05005040	Folkestone Harvey Central	E01024508	Shepway 015A	1		reception
		E01033212	Shepway 014C	1	4	year six
E05005041	Folkestone Harvey West	E01024509	Shepway 015B	1		year six
		E01024510	Shepway 015C	2		reception
E05005043	Folkestone Park	E01024516	Shepway 006F	3		year six
E05005044	Folkestone Sandgate	E01024519	Shepway 006G			year six
				4		
E05005045	Hythe Central	E01024525	Shepway 010C	3		reception/ year six
E05005046	Hythe East	E01024528	Shepway 005F	2		reception/ year six
E05005047	Hythe West	E01024529	Shepway 010D	2		reception
		E01024530	Shepway 009B	3		reception/ year six
E05005048	Lydd	E01024532	Shepway 013A	3		year six
		E01024533	Shepway 013B	2		reception
E05005051	New Romney Town	E01024539	Shepway 012C	2		year six
		E01024540	Shepway 012D	3		year six
E05005052	North Downs East	E01024541	Shepway 002B	2		reception/ year six

WARDS:

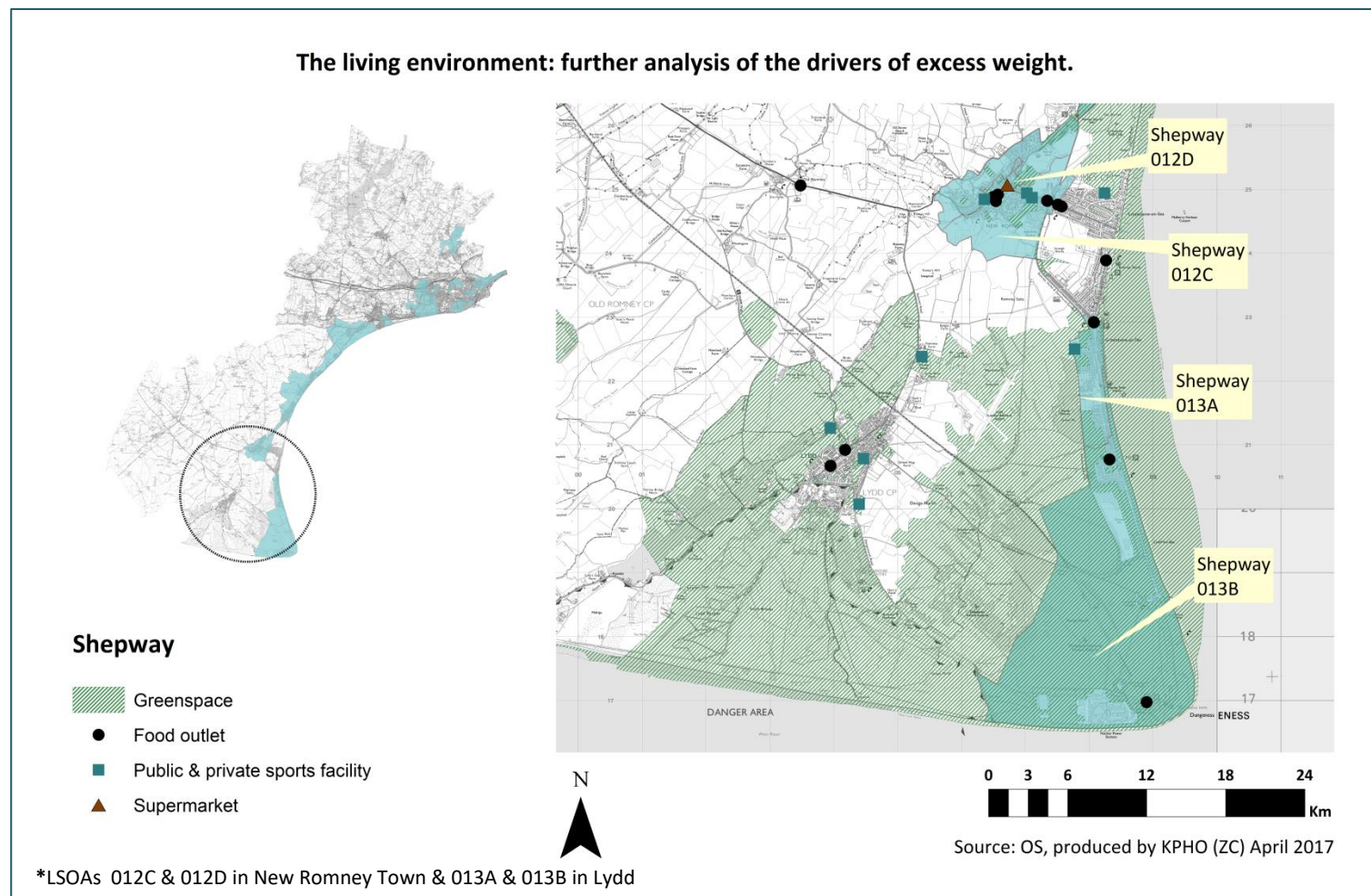
- Lydd,
- New Romney Town,

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.



THE LIVING ENVIRONMENT:

- Rural and urban classification is Town & Fringe in New Romney and Village in Lydd.
- Some evidence for lower access to supermarkets within parts of Lydd (013B), driven by greater distances to supermarkets.
- Less than 50% of the population with access to greenspace.
- Distance to nearest food outlet within 1200m.

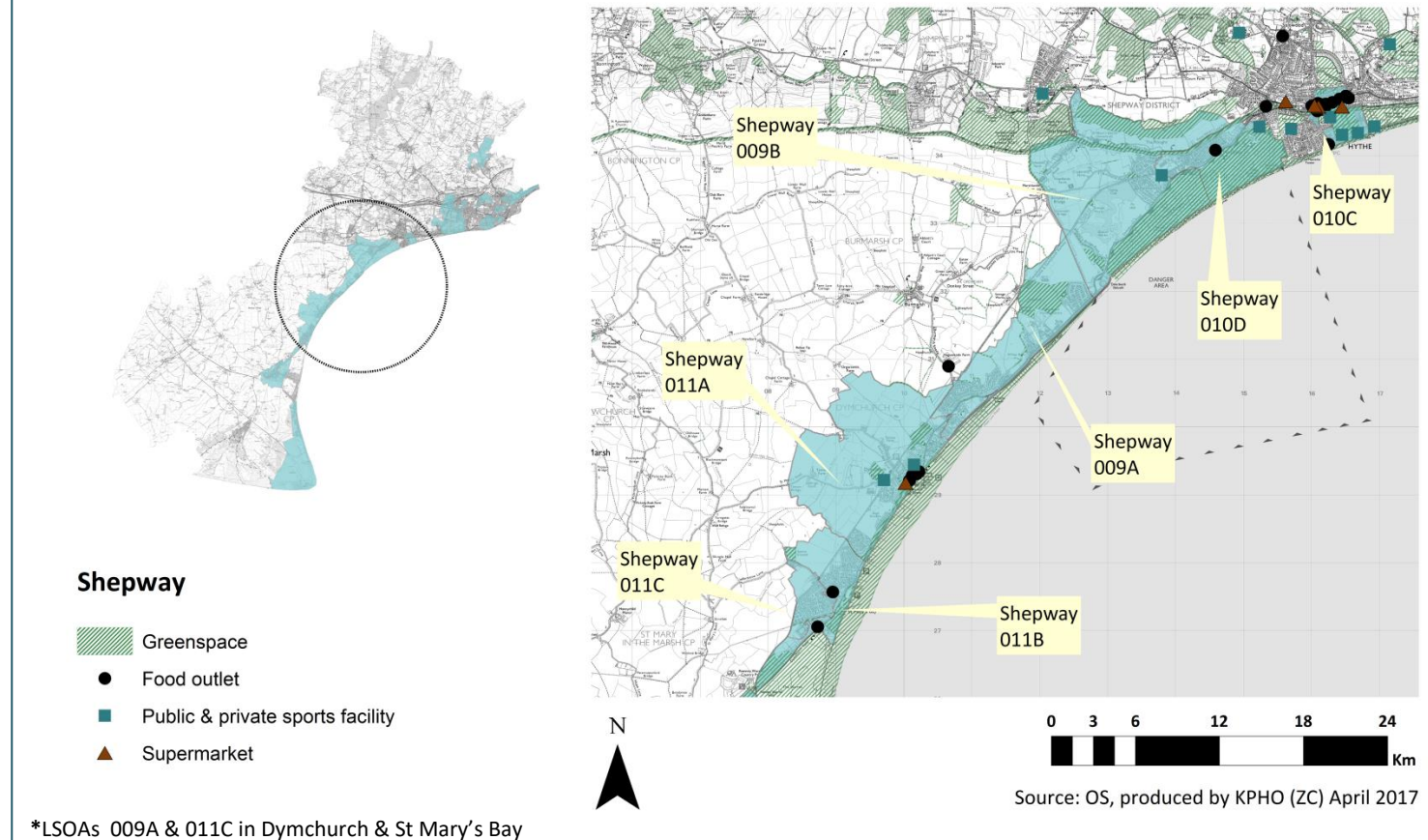
WARDS:

- Dymchurch & St Mary's Bay,
- Hythe Central,
- Hythe West,

ETHNICITY:

Some association between black ethnicity and excess weight. Not an area with high concentration of black individuals in the population.

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



THE LIVING ENVIRONMENT:

- Rural and urban classification is Urban within LSOAs closer to Hythe, whereas, Town & Fringe and Village in remaining areas.
- Good access to supermarkets.
- Greater than 50% of LSOA populations have access to greenspace in Hythe. Lower greenspace access within some parts*.
- Distance to nearest food outlet within 1200m.

WARDS:

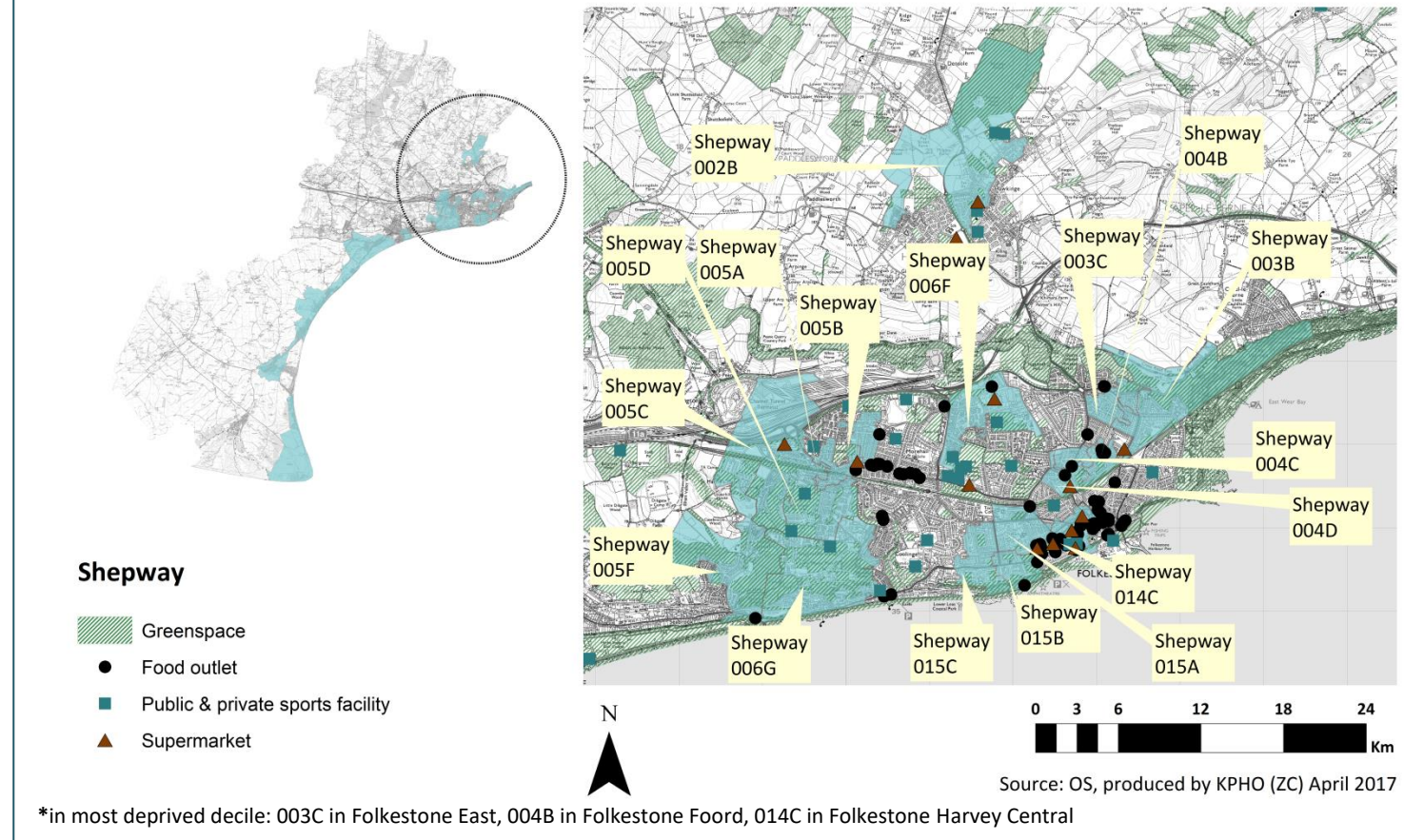
- Folkestone Cheriton,
- Folkestone East*,
- Folkestone Foord*,
- Folkestone Harvey Central*,
- Folkestone Harvey West,
- Folkestone Park,
- Folkestone Sandgate,
- Hythe East,
- North Downs East,

*LSOAs within most deprived decile.

ETHNICITY:

Weak association between black ethnicity and excess weight.

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



THE LIVING ENVIRONMENT:

- Rural and urban classification is Urban, except for 002B as Town & Fringe.
- Low access to supermarkets within parts of Folkestone East, Foord, Harvey Central & Harvey West; driven by low car ownership.
- Less than 50% of the population with access to greenspace in Folkestone East, Harvey Central & North Downs East.
- Distance to nearest food outlet within 1200m, except for North Downs East (002B).

| 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)