

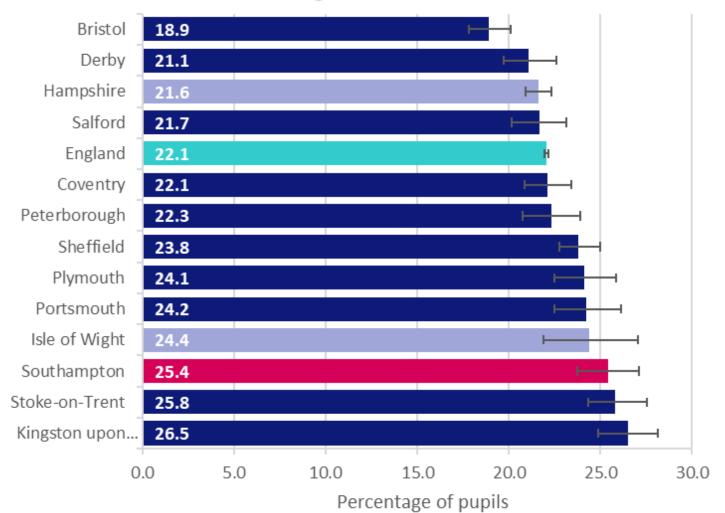
- Year 6 prevalence of overweight (including obesity) rates in Southampton are now significantly higher than England, in Southampton in 2023/24 40.4% of Year 6 are overweight including obesity compared with 35.8% in England
- Children in Southampton are likely to become a less healthy weight in the time between Year R and Year 6.
   Especially in more deprived areas. Nearly a third (32.4%) of healthy weight Year R students are overweight including obese by the time they reach Year 6
- While **Year R obesity** is a **predictive factor** for **obesity** in **Year 6**, **interventions** targeted at **obese children** in **Year R** will only have the potential to reduce Year 6 obesity by a **maximum of one third** (as **two thirds of obese Year 6 children were not obese in Year R** (2021/22))
- Southampton has **significant differences** in childhood overweight and obesity rates **between deprivation quintiles**, **ethnicities** and **sexes**. **Males**, children living in **more deprived areas** and children with **Caribbean or Bangladeshi ethnicity** have the **highest rates** of Year 6 overweight and obesity



### Year R overweight and obesity prevalence in Southampton



# NCMP Year R overweight and living with obesity combined (by postcode of school) - Southampton and Children's Statistical Neighbours: 2023/24



- 25.4% of Year R children measured in Southampton had excess weight in 2023/24, the highest levels of excess weight (excluding pandemic 2020/21) of 25.4% or 1 in 4 over the last 8 years, significantly higher than the England average (22.1%)
- Ranking us 3<sup>rd</sup> highest among Children's statistical neighbours and 4th highest among our 16 CIPFA comparators.
- Approximately 85 less Year R children
  being overweight or obese would see us
  with same prevalence as England.

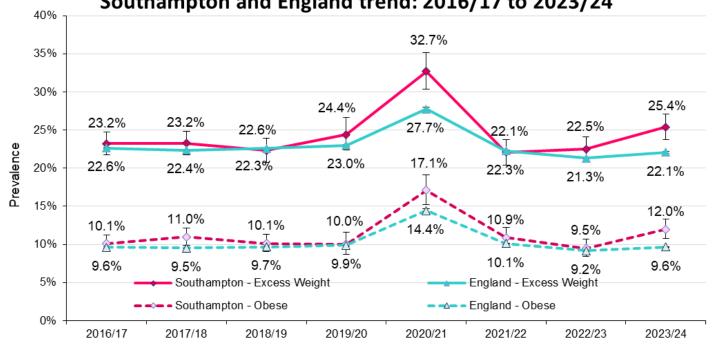
Source: NCMP Dataset, NHS England



### Year R overweight and obesity prevalence in Southampton

# southampton dataobservatory

## Year R Obesity and Excess Weight Southampton and England trend: 2016/17 to 2023/24



Source: NHS Digital NCMP Enhanced data sets 2016/17 to 2021/22 with 95% Confidence Intervals (Wilson), 2022/23 and 2023/24 data via NHS

2023/24 England - Year R: Obese 9.6% Excess Weight 22.1% Southampton - Year R: Obese 12.0% Excess Weight 25.4%

NCMP measurements in 2019/20 and 2020/21 were disrupted by the COVID-19 pandemic. 2021/22 NCMP was the first data collection since the COVID-19 pandemic that was unaffected by school closures and other public health measures.

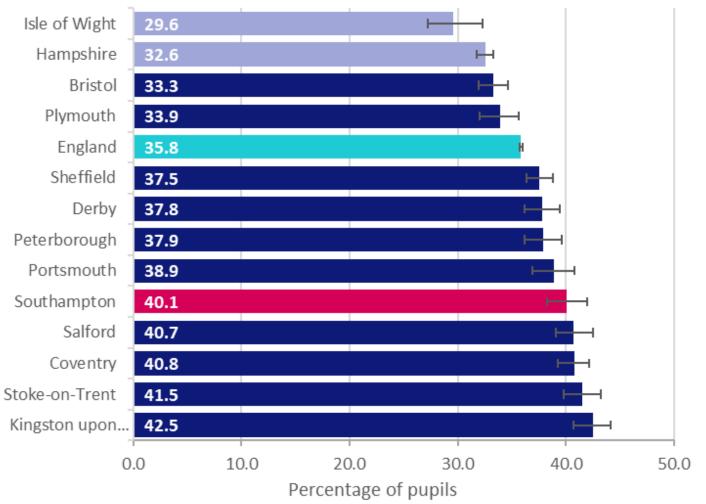
- 2023/24 Southampton's excess weight prevalence increased by 2.9% (percentage points vs the year prior) while England increased by 0.8%. This was driven by 2.5% percentage point increase in the prevalence of obese Year R while England increased by 0.5%.
  - 12.0% of children in Southampton schools are classed as obese (around 1 in 8), also significantly higher than the England average of 9.6% (1 in 10 children).
- Looking over the last 8 years (excluding the pandemic year of 2020/21) this is the highest prevalence of obese in our Year R school children and ranks Southampton 4th worst among its 16 CIPFA comparators.

Approximately **60 less Year R children** being **obese** would see us with **same prevalence** as **England.** 

### Year 6 overweight and obesity prevalence in Southampton



# NCMP Year 6 overweight and living with obesity combined (by postcode of school) - Southampton and Children's Statistical Neighbours: 2023/24



- 40.1% of Year 6 children measured in Southampton were overweight in 2023/24. This is significantly higher than the England average (35.8%) – need approximately 115 less Year 6 children to be classed as overweight or obese at our schools to meet the England average
- Ranking us 5<sup>th</sup> highest among Children's statistical neighbours and 8<sup>th</sup> highest among our 16 CIPFA comparators.

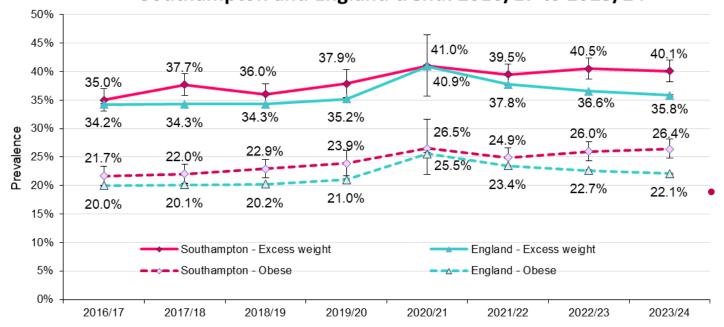
Source: NCMP Dataset, NHS England



### Year 6 overweight and obesity prevalence in Southampton



### Year 6 Obesity and Excess Weight Southampton and England trend: 2016/17 to 2023/24



Source: NHS Digital NCMP Enhanced data sets 2016/17 to 2021/22 with 95% Confidence Intervals (Wilson), 2022/23 and 2023/24 data via NHS Digital Table 3a 6

2023/24 England - Year 6: Obese 22.1% Excess Weight 35.8%

Southampton - Year 6: Obese 26.4% Excess Weight 40.1%

NCMP measurements in 2019/20 and 2020/21 were disrupted by the COVID-19 pandemic. 2021/22 NCMP was the first data collection since the COVID-19 pandemic that was unaffected by school closures and other public health measures.

Historic rates of Year 6 excess weight in Southampton have been similar or significantly higher than the England average since 2016/17, where England has continued to fall in the last 3 years. In 2023/24 this gap grew wider. The percentage point gap of 4.3% is the widest seen in this period.

Southampton has seen a 21% increase in Year 6 obesity rates since 2016/17. Rates in England have increased by 11% over the same period but have been on a downward trajectory for the last 3 years.

Southampton (26.4%) is significantly higher than the England average (22.1%), ranking Southampton 7th worst, we would need 115 Southampton Year 6 school children to be classed as a healthier weight instead of obese to match the same prevalence as England



#### Southampton children in Year R 2015/16 to 2017/18



**Underweight** 0.8% **→** 1.7%

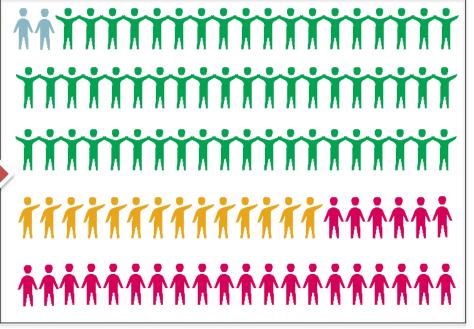
**¥ Healthy weight** 76.2% → 58.3%

**Overweight** 12.4% → 14.2%

**↑ Very overweight** 10.3% → 25.7%

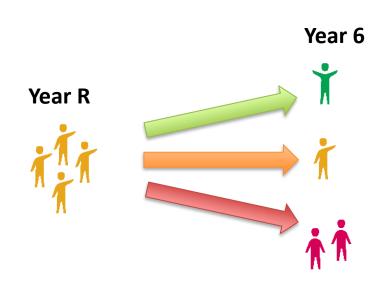
The NCMP records of **6,944 Southampton school students** who were measured in **Year R** and **Year 6** have been **linked by their NHS number** to show how their **BMI changed** between these two measurements.

#### Southampton children in Year 6 2021/22 to 2023/24

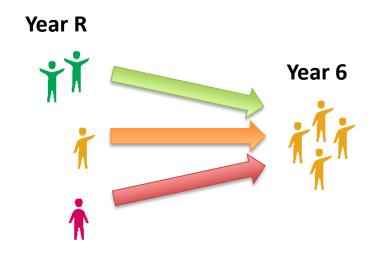




We can use the linked analysis to see how each Year R BMI group progressed over the next 6 years...



...or to see the origins of each Year 6 BMI category.



### Single year 2023/24



### Southampton – Single year 2023/24

Year 6 BMI of students who were overweight in year R (school year 2023/24)



**50.6%** of them were **very overweight** (clinically obese) by the time they were in **Year 6.** 

267 Year 6 children

measured in 2023/24 were

**overweight** when they

were measured in Year R.

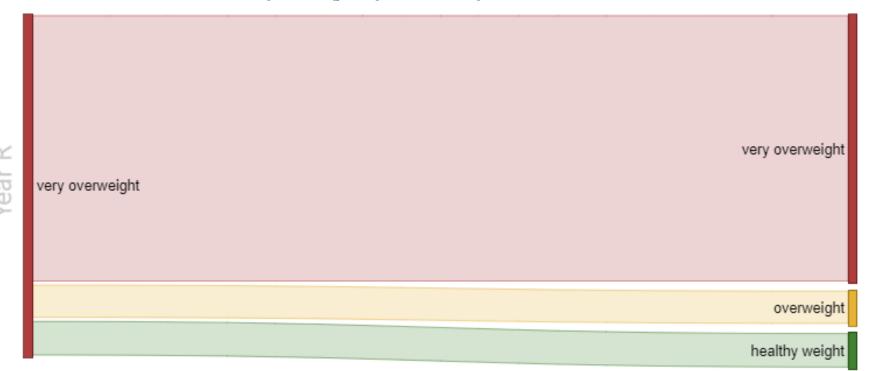
267
Year R Students

Year	б ВМI Category	Students	96
vei	ry overweight	135	50.6%
he	althy weight	77	28.8%
	overweight	55	20.6%

Data for underweight children has been excluded due to small numbers

### Southampton – Single year 2023/24

Year 6 BMI of students who were very overweight in year R (school year 2023/24)



were measured in Year R.

- **82.4%** of them were still **very overweight** in **Year 6.**
- 91.0% of them had excess weight by the time they were in Year 6.
- Year R obesity is a clear predictive factor for obesity in Year 6. However...

Year 6 BMI Category	Students	96
very overweight	202	82.4%
healthy weight	22	9.0%
overweight	21	8.6%





### Southampton – Single year 2023/24

Year R BMI of students who were overweight in Year 6 (school year 2023/24)



**299**Year 6 Students

Year R BMI Category	→ Students	96
healthy weight	223	74.6%
overweight	55	18.4%
very overweight	21	7.0%

 When looking at this the other way...

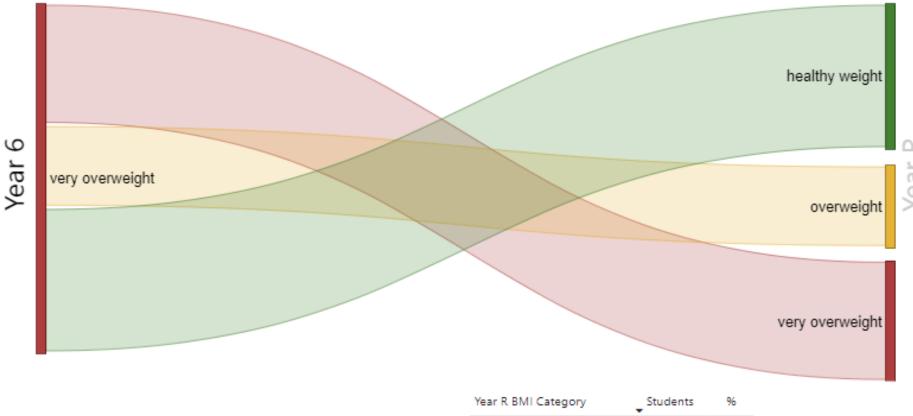
- 299 Year 6 children
  measured in 2023/24 were
  overweight.
- 74.6% of them were originally a healthy weight when they were measured in Year R.





### Southampton – Single year 2023/24

Year R BMI of students who were very overweight in Year 6 (school year 2023/24)



581
Year 6 Students

Year R BMI Category	Students	96
healthy weight	244	42.0%
very overweight	202	34.8%
overweight	135	23.2%

**581 Year 6 children** measured in 2023/24 were **very overweight.** 

**42.0%** of them were a **healthy weight** when they were measured in **Year R.** 

While Year R obesity is a predictive factor for obesity in Year 6, interventions targeted at obese children in Year R will only have the potential to reduce Year 6 obesity by a maximum of one third (as two thirds of obese Year 6 children were not obese in Year R.

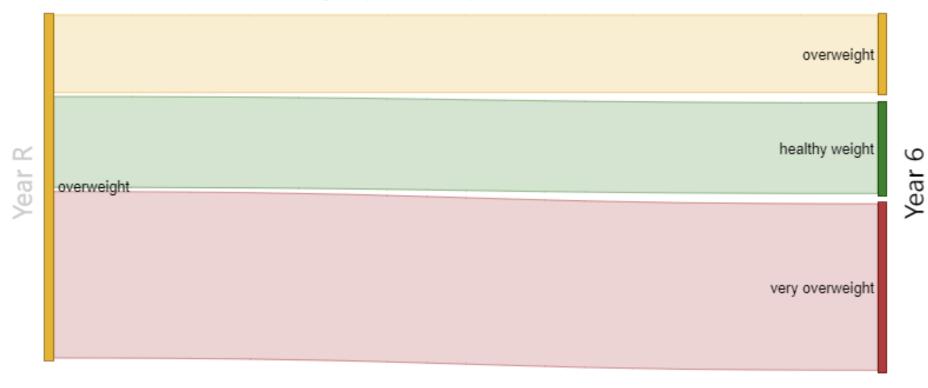
### Linked analysis 3-year pooled 2021/22 to 2023/24





### Southampton – 3-year pooled 2021/22 to 2023/24

Year 6 BMI of students who were overweight in year R (school year)



Year 6 BMI Category	Students	96
very overweight	430	49.9%
healthy weight	233	27.196
overweight	198	23.0%

- 861 Year 6 children
  measured in the 3 years
  2021/22 to 2023/24 were
  overweight when they
  were measured in Year R.
- 49.9% of them were very overweight (clinically obese) by the time they were in Year 6.



### **Southampton – 3-year pooled 2021/22 to 2023/24**

Year 6 BMI of students who were very overweight in year R (school year )



Year 6 BMI Category	Students	%
very overweight	587	81.8%
overweight	74	10.396
healthy weight	57	7.9%

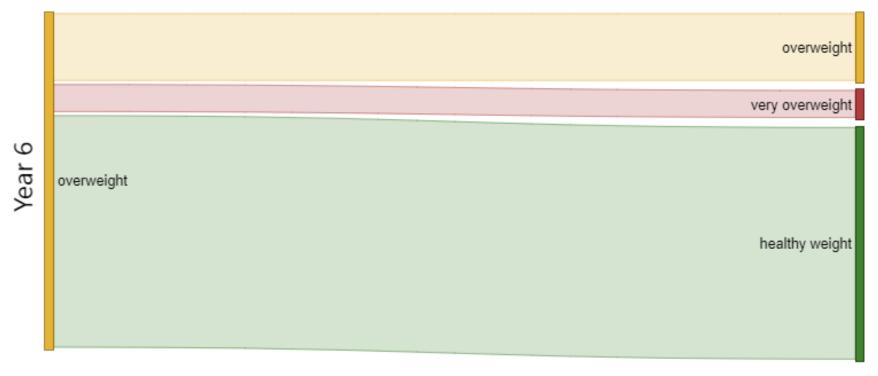
- 718 Year 6 children measured in the 3-year period 2021/22 to 2023/24 were very overweight when they were measured in Year R.
- 81.8% of them were still very overweight in Year 6.
- 92.1% of them had excess
   weight by the time they were
   in Year 6.
- Year R obesity is a clear predictive factor for obesity in Year 6. However...





### **Southampton – 3-year pooled 2021/22 to 2023/24**

Year R BMI of students who were overweight in Year 6 (school year )



Year R BMI Category	Students	96
healthy weight	712	72.4%
overweight	198	20.1%
very overweight	74	7.596

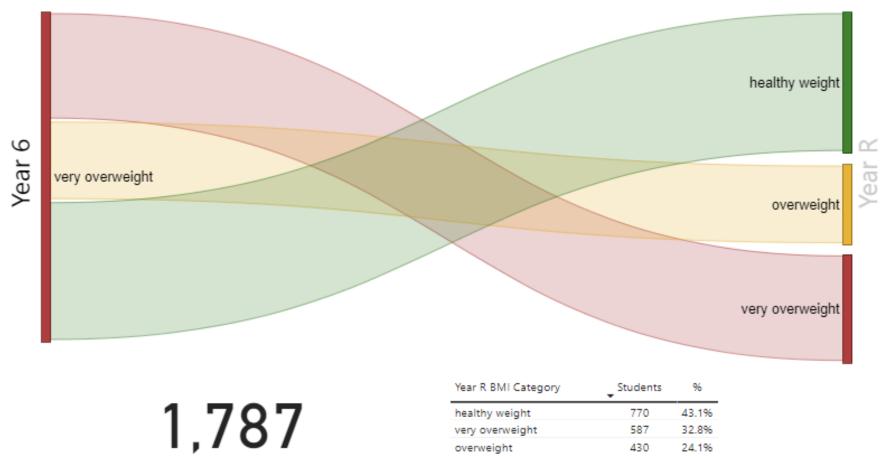
- When looking at this the other way...
- 984 Year 6 children
  measured in the period
  2021/22 to 2023/24 were
  overweight.
- 72.4% of them were originally a healthy weight when they were measured in Year R.



# southampton dataobservatory

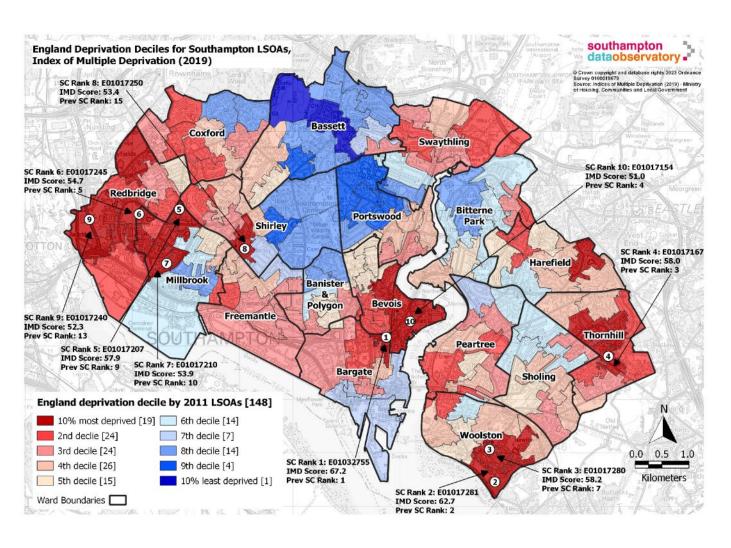
### Southampton – 3-year pooled 2021/22 to 2023/24

Year R BMI of students who were very overweight in Year 6 (school year)



- 1,787 Year 6 children
  measured in the period
  2021/22 to 2023/24 were
  very overweight.
- 43.1% of them were a
   healthy weight when they
   were measured in Year R.
- While Year R obesity is a predictive factor for obesity in Year 6, interventions targeted at obese children in Year R will only have the potential to reduce Year 6 obesity by a maximum of one third (as two thirds of obese Year 6 children were not obese in Year R.

### **Deprivation in Southampton**



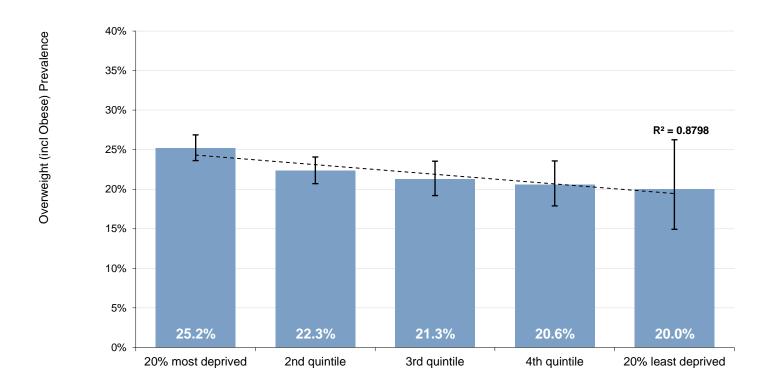
- The relationship between deprivation and health is well documented (Marmot, 2010).
- Southampton is a relatively deprived city. Its average deprivation is ranked 55<sup>th</sup> out of England's 317 local authorities (IMD 2019).
- Around 12% of Southampton's population live in neighbourhoods within the 10% most deprived nationally; this rises to 18% for the under 18 population, suggesting deprivation disproportionately impacts young people in the city.
- There are **vast disparities** in Southampton as **some neighbourhoods** are among the **least deprived** in England.



### Year R overweight and obesity by deprivation



Percentage of Children Considered to be Overweight Including Obese in Year R by England Deprivation Quintile: 2021/22 to 2023/24 (pooled)



Overweight and obesity in Year R is more prevalent in the most deprived quintile (25.2%) than the least deprived quintile (20.0%).

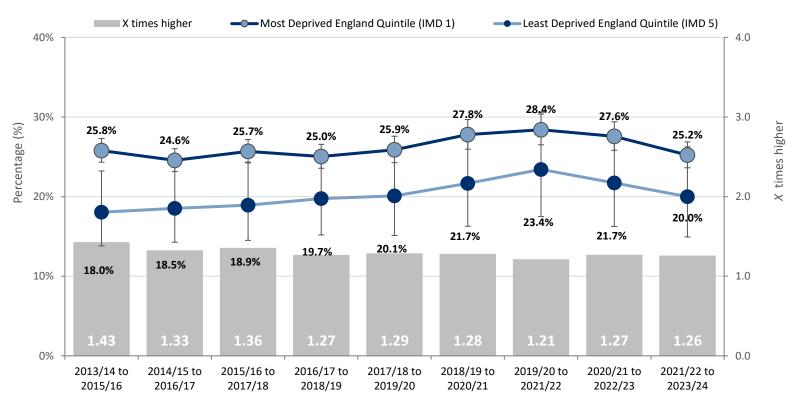
R square coefficient s (r=0.94) shows a strong relationship between Year R overweight (including obese) and deprivation

Source: National Child Measurement Programme Pupil Enhanced Data Set, NHS Digital - Lifestyle Statistics



### Year R overweight and obesity by deprivation

Percentage of children considered to be overweight (incl. obese) in Year R Inequalities Trend - Most Vs Least Deprived IMD England Quintiles (IMD 2019): 2013/14-15/16 to 2021/22-23/24 (pooled)



Sources: National Child Measurement Programme Pupil Enhanced Data Set, NHS Digital - Lifestyle Statistics (data for 2013/14 onwards)

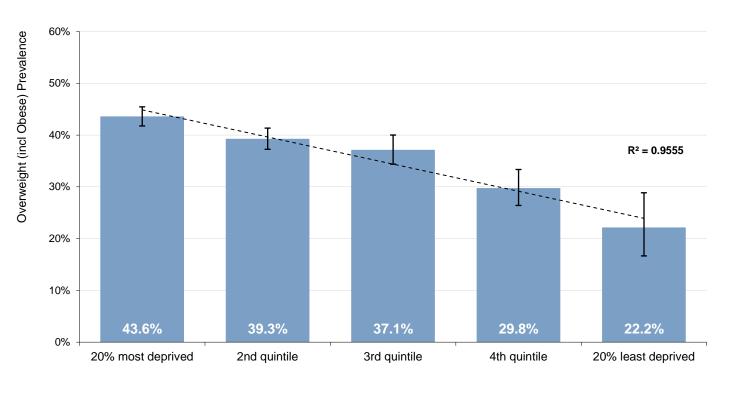
- For the period 2021/22 to 2023/24
  the Year R rate of overweight and
  obesity in Southampton's most
  deprived quintile was 1.27x
  higher than the least deprived.
- The deprivation gap has remained similar since 2016/17 to 2018/19. While the prevalence of excess weight reduced for the most and least deprived quintile in 2021/22 to 2023/24, the gap widened slightly as the reduction was greater in the least deprived quintile.



### Year 6 overweight and obesity by deprivation



### Percentage of Children Considered to be Overweight Including Obese in Year 6 by England Deprivation Quintile: 2021/22 to 2023/24 (pooled)



Source: National Child Measurement Programme Pupil Enhanced Data Set, NHS Digital - Lifestyle Statistics

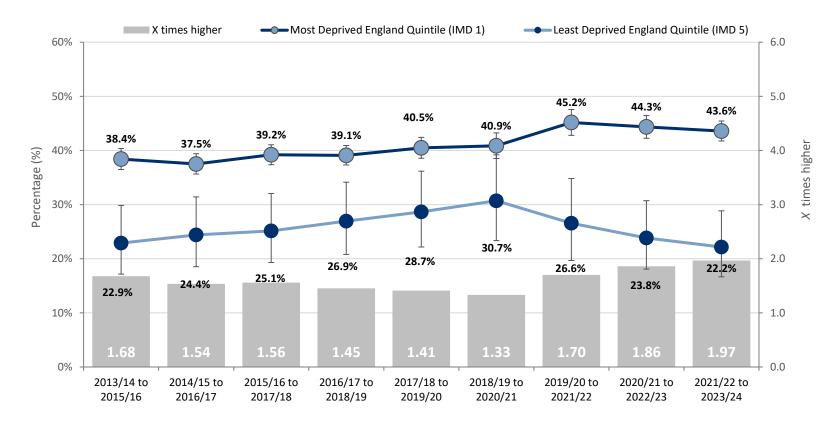
- Overweight and obesity in Year 6 children is statistically significantly more prevalent in the most deprived quintile (43.6%) than the least deprived quintile (22.2%) (2021/22 to 2023/24 pooled).
- R square coefficient s (r=0.98) shows a very strong relationship between Year 6 overweight (including obese) and deprivation, (stronger than that for year R)



### Year 6 overweight and obesity by deprivation



Percentage of children considered to be overweight (incl. obese) in Year 6 Inequalities Trend - Most Vs Least Deprived IMD England Quintiles (IMD 2019): 2013/14-15/16 to 2021/22-23/24 (pooled)



Sources: the National Child Measurement Programme Pupil Enhanced Data Set, NHS Digital - Lifestyle Statistics (data for 2013/14 onwards)

- For the period 2021/22 to 2023/24 the Year 6 rate of overweight and obesity in Southampton's most deprived quintile was 1.97x higher than the least deprived.
- The deprivation gap has been growing since 2018/19 to 2020/21 for Year 6. While the prevalence of excess weight reduced in the most and least deprived quintiles in 2021/22 to 2023/24, the gap continued to widen as the reduction was greater in the least deprived quintile.



### Southampton – Single year 2023/24

Year 6 BMI of students who were healthy weight in year R (school year 2023/24)



77.9% of children who were a healthy weight in Year R and lived in Southampton's least deprived quintile were still a healthy weight by the time they reached Year 6 (school year 2023/24).

Year

Year 6 BMI Category	Students	96
healthy weight	211	77.9%
overweight	31	11.4%
very overweight	29	10.7%



### Southampton – Single year 2023/24

Year 6 BMI of students who were healthy weight in year R (school year 2023/24)



66.7% of children who were a healthy weight in Year R and lived in Southampton's most deprived quintile were still a healthy weight by the time they reached Year 6 (school year 2023/24).

436

Year 6 BMI Category	Students	96
healthy weight	291	66.7%
very overweight	82	18.8%
overweight	63	14,496

### **Southampton – 3-year pooled 2021/22 to 2023/24**

Year 6 BMI of students who were healthy weight in year R (school year)



79.9% of children who were a healthy weight in Year R and lived in Southampton's least deprived quintile were still a healthy weight by the time they reached Year 6.

Year 6 BMI Category	Students	96
healthy weight	616	79.9%
overweight	93	12.196
very overweight	62	8.0%

### **Southampton – 3-year pooled 2021/22 to 2023/24**

Year 6 BMI of students who were healthy weight in year R (school year)



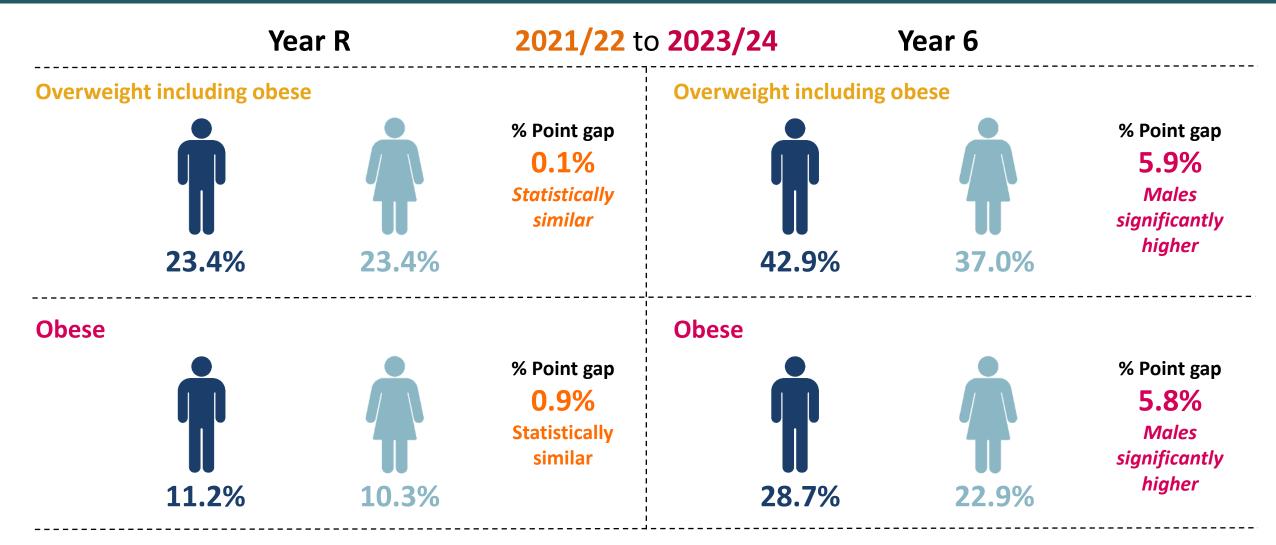
 66.8% of children who were a healthy weight in Year R and lived in Southampton's most deprived quintile were still a healthy weight by the time they reached Year 6.

1,461

Year 6 BMI Category	Students	96
healthy weight	976	66.8%
very overweight	266	18.296
overweight	219	15.0%

### **Sex differences in NCMP measurements**





Prevalence of obesity and overweight including obesity is significantly higher in Year 6 males compared to Year 6 females but statistically similar between the sexes in Year R.



### **Ethnicity differences in NCMP measurements**



Prevalence of Southampton children who are very overweight and obese by ethnicity, ranked highest to lowest (Yr R -2016/17-2018/19 and Yr6 – 2021/22-2023/24)

Year R Rank

Year 6 Rank

White and Black African

Bangladeshi

White and Black Caribbean

Irish

Caribbean

African

Any other Asian background

British

Any other mixed background

Pakistani

Any other ethnic group

Any other white background

Chinese

Indian

White and Asian

African

Bangladeshi

White and Black African

White and Black Caribbean

Indian

Any other Asian background

White and Asian

British

Any other white background

Any other ethnic group

Caribbean

Any other mixed background

Pakistani

Irish

Chinese

 32.6% of children with from white and black African backgrounds had excess weight in Year R. This group also had the 3<sup>rd</sup> highest prevalence of excess weight in Year 6 (44.8%).

Children with **Bangladeshi** ethnicity are among the **most likely** to have **excess weight** in **Year R** (**30.4**%) and **Year 6** (**49.5**%).

ethnicity were among the least likely to have excess weight in Year R but are more likely in Year 6.

• Children with a **White British** ethnicity had an excess weight of **24.0**% in **Year R** and rate **39.3**% in **Year 6**.

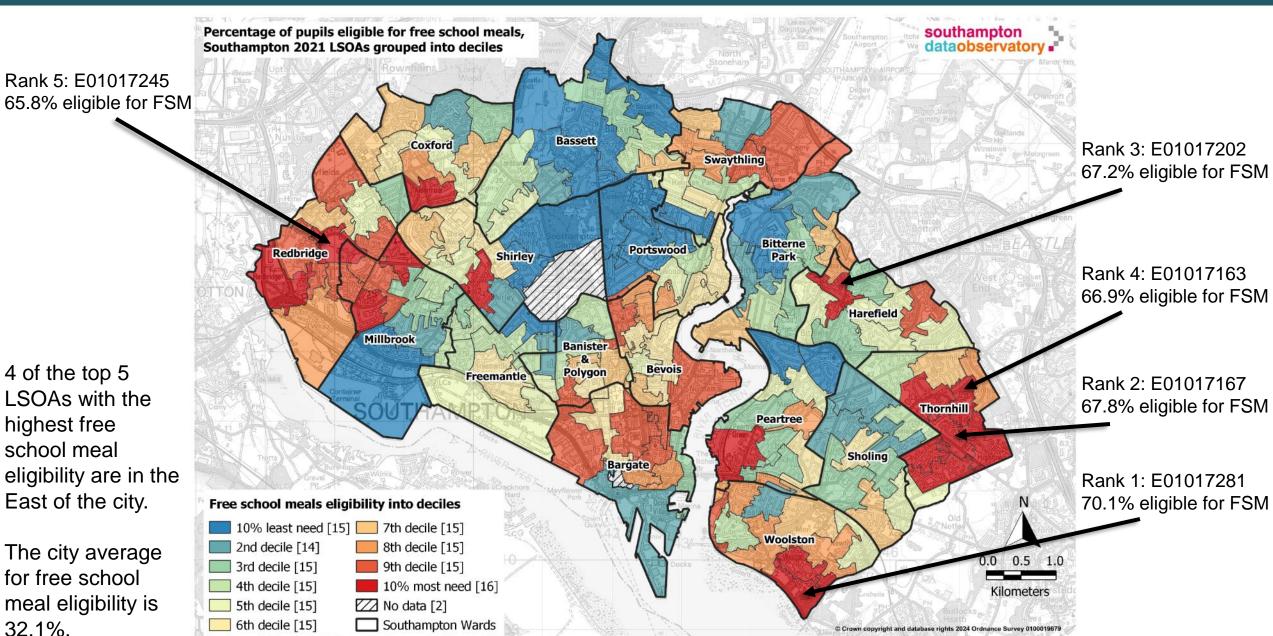


### **Food environment presentation**

More information on the food environment is available in the Food Environment Presentation available of the Southampton Data observatory



### Free school meals eligibility 2022/23

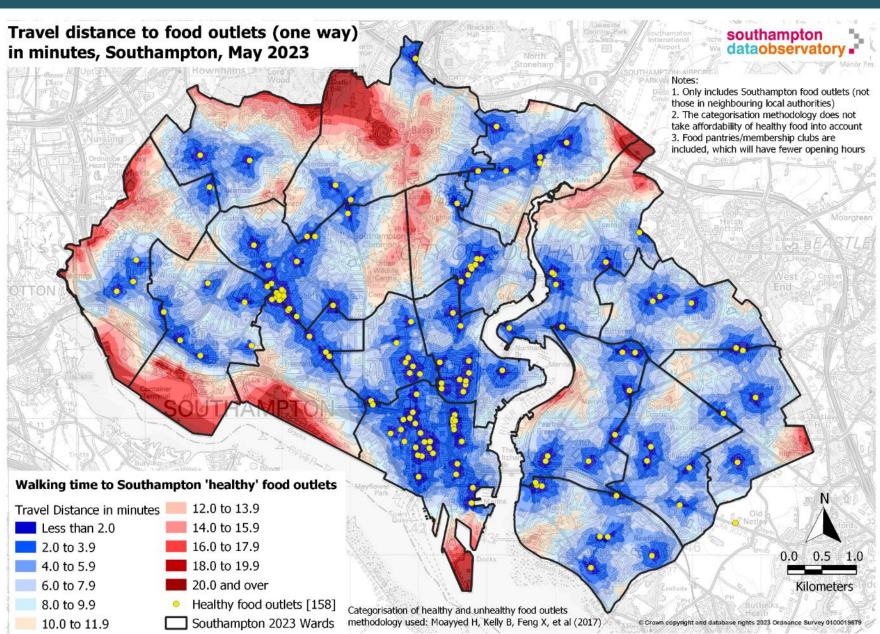


### **Healthy outlets**

Areas on the outskirts of the city have at least a 16 minute walk to healthy food outlets.

In the East and Central of the city, majority of residents are able to walk to a health food outlet within 10 minutes.

Areas in Millbrook and Freemantle have a 20 minutes or more walk to healthy food outlets, however less of the population live in these areas due to it being the Southampton Docks.





### Supermarkets (Geolytixs)

Supermarkets fairly accessible across the city, at least by car.

Walking potentially less feasible to residents in certain pockets across the city (parts of Bevois, Redbridge, north and eastern wards)

Further travel distance to largest supermarkets (D) in East of the city, especially Woolston – although still an estimated 10 minute drive (one way)

https://geolytix.com/#geodata

Four way classification for size band of store:

- A Less than 3,013 ft2 (280 m2)
- C-Store with unlimited Sunday hours in England and Wales.
- B 3,013 to 15,069 ft2 (280 m2 to 1,400 m2)

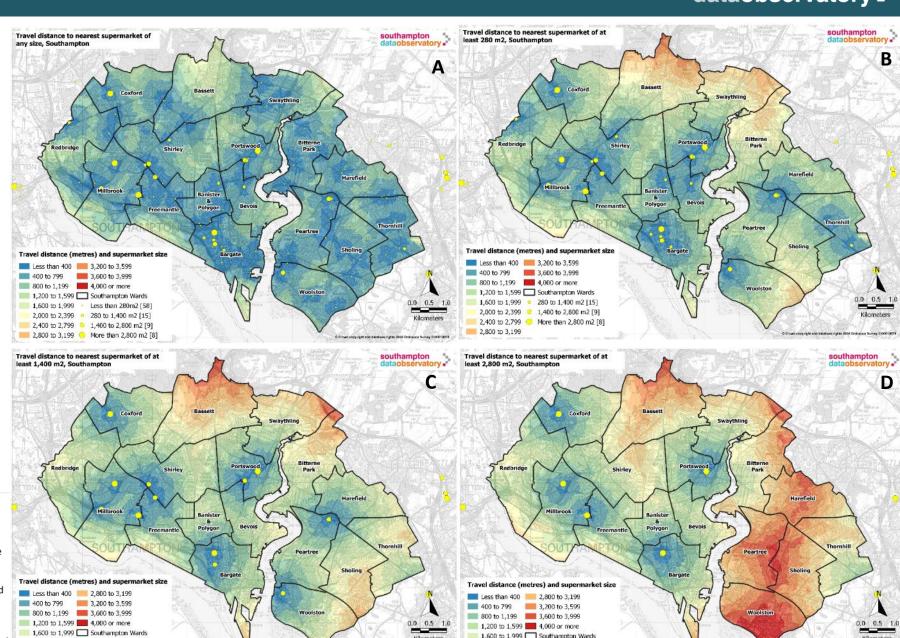
Mid-sized grocer as defined by the CMA. Restricted Sunday hours, typically the large majority is food.

C - 15,069 to 30,138 ft2 (1,400 to 2,800 m2)

Large supermarkets as defined by the CMA. Typical 'large' supermarket with GM and fashion offer.

 $D - 30,138 + ft^2 (2,800 + m^2)$ 

Also large as classified by the CMA. This is a Geolytix arbitrary banding to equate roughly to a hypermarket, typically with significant clothing and GM departments and large free car park.



### Food – access and costs

In 2021, the cost of a 20 item basket of goods varied from £16.27 at Tesco in New Milton to £38.70 at Tesco Express in Brockenhurst; the difference persisted in 2023.

Notably, **smaller communities** and villages had **higher costs** for this basket

Interviewees noted the lack of affordable transport to larger stores where food was cheaper

'For someone like me who doesn't drive, it's definitely the small shops that are quite expensive to live on' Gabby, resident

Smith et al, 2021: doi:10.5258/SOTON/P1188





#### **E-food Desert Index**



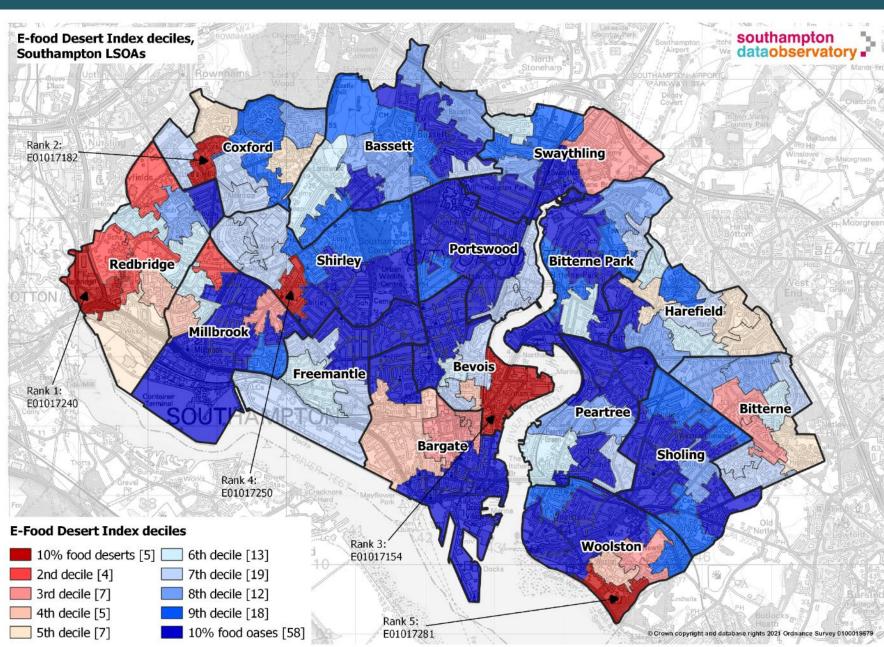
National index by LSOAs produced by University of Leeds in 2020.

Measures the extent to which LSOAs exhibit characteristics associated with food deserts, whilst also considering the online shopping behaviours – by four key drivers:

- Proximity and density of grocery retail facilities
- Transport and accessibility
- Neighbourhood socio-economic and demographic characteristics
- E-commerce availability and propensity

Majority of Southampton classed as food oases, although some neighbourhoods in more deprived parts of the city appear as food deserts.

https://data.cdrc.ac.uk/dataset/e-food-desert-index

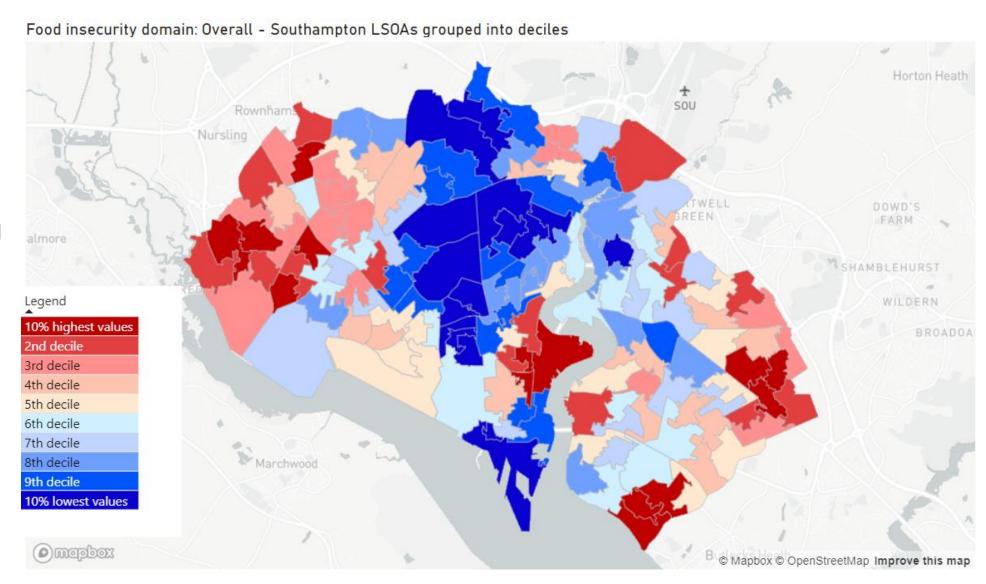




### **Food insecurity**

Food insecurity data supplied by University of Southampton uses an overall index combining the two sub domains; compositional (including benefit claimants, low income, mental health and educational attainment) and structural (bus stops, distances to employment/food stores and internet speeds).

Overall, the maps suggests food insecurity mirrors the high levels of deprivation across the city.

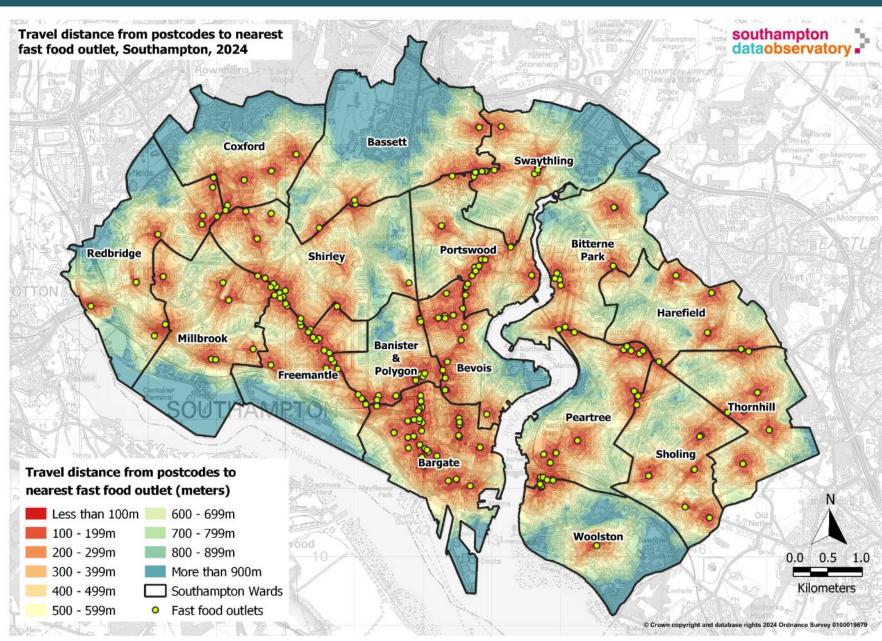


#### **Fast food**

Fast food easily accessible across the city by foot or car, some pockets on the edges of the city where one would have to travel 1 km or more, however a delivery driver would still be able to travel those distances within 5 to 10 minutes.

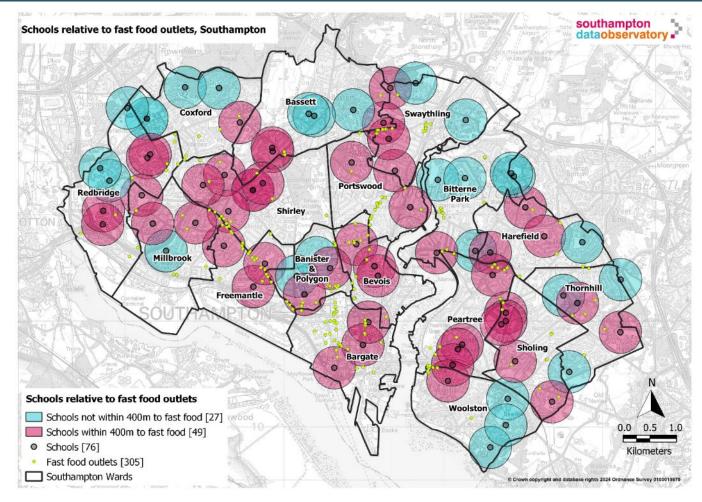
Fast food outlets outside the local authority are not considered. Outlets in areas such as Totton and Eastleigh may increase ease of access, especially for neighbourhoods on the outskirts of Southampton.

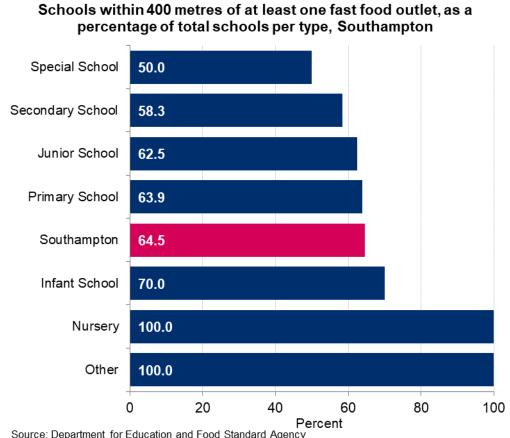
https://ratings.food.gov.uk/











Source: Department for Education and Food Standard Agency

"Other" includes Pupil Referral Unit, All through School and Hospital school

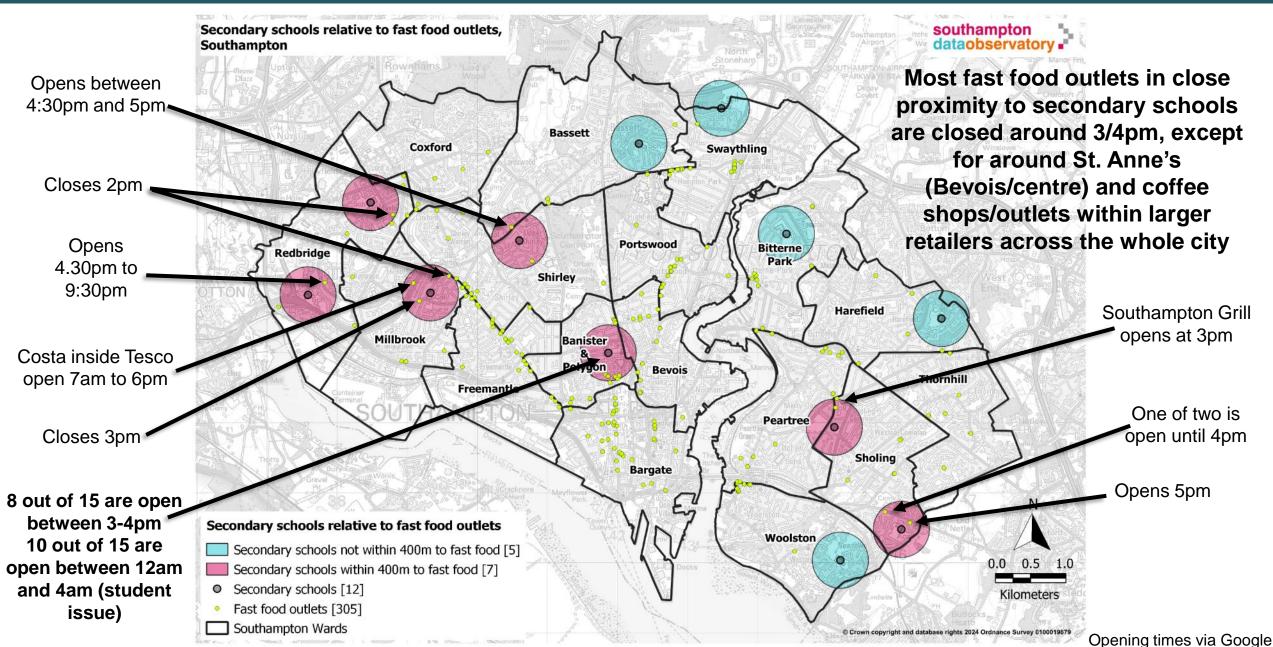
Across the whole city 64.5% of schools are within 400 metres of a fast food outlet.

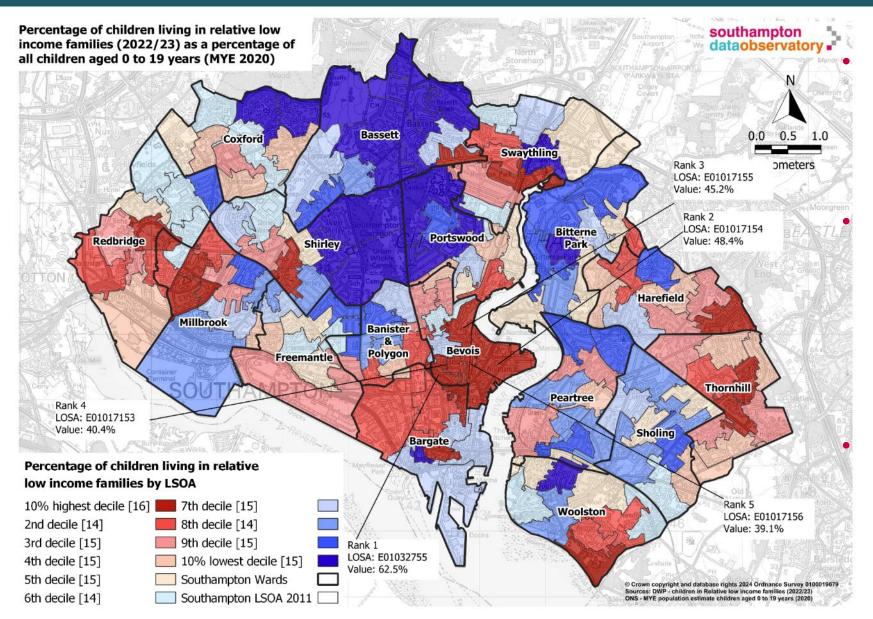
Schools around the city centre and more deprived wards are generally in closer proximity to fast food outlets.

All schools in Bargate, Bevois, Freemantle, Peartree, Portswood, Shirely and Sholing are within 400 metres of a fast food outlet however in Woolston, Coxford and Bitterne Park it was 25% or less of schools.

### Fast food



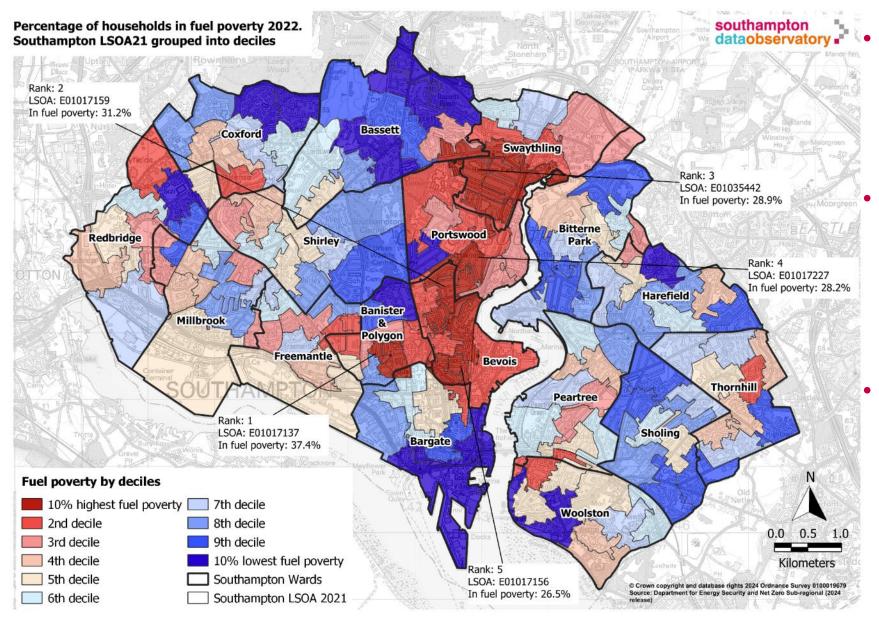




Each decile contains around 15 neighbourhoods which have been ranked highest to lowest, then grouped into tenths

Southampton has significantly higher percentage of children in child poverty (19.6%) compared to England households in fuel poverty (18.5%).

The range of the proportions of neighbourhoods in fuel poverty varies from the highest levels of a fuel poverty neighbourhood in Bevois (62.5%) to the lowest; 1.1% in Bitterne Park



- Each decile contains around 15 neighbourhoods which have been ranked highest to lowest, then grouped into tenths
- Southampton has fewer households in fuel poverty (11.8%) compared to England households in fuel poverty (13.1%).
- The range of the proportions of neighbourhoods in fuel poverty varies from the highest levels of a fuel poverty neighbourhood in Banister and Polygon (37.4%) to the lowest; 3.0% in Woolston (High density new builds in Centaury Quay)



### Households with no car or van (2021)



Number of cars or vans: No cars or vans in household

Southampton E01032750: 62.4 Highest LSOA Lowest LSOA city average

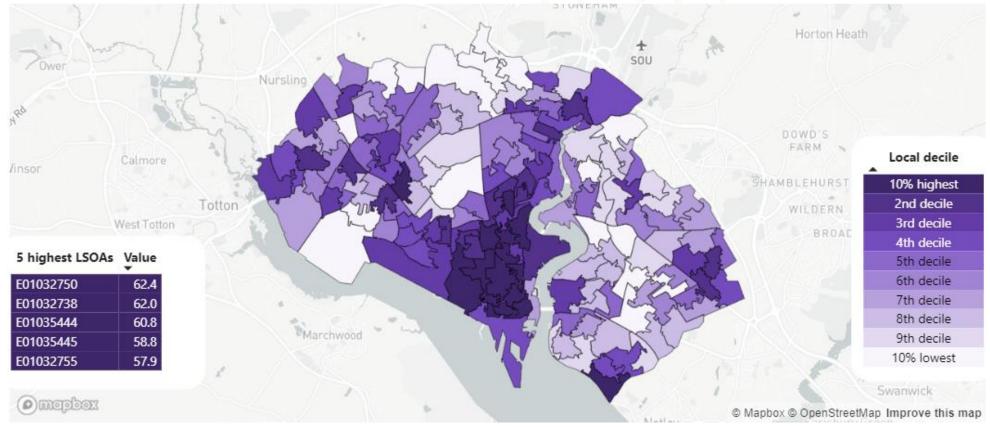
27.4

E01032750: 62.4

E01017148: 6.7

### Significantly higher

Number of cars or vans: No cars or vans in household, deciles of households, Southampton by lower layer super output areas (LSOAs): Census 2021



From the 2021 Census. there are lesser car or van ownership within city centre (Bevois, Bargate, Freemantle), plus student areas of Portswood and Swaythling, but also some more deprived parts in the East and West of Southampton (Redbridge, Woolston, Bitterne).

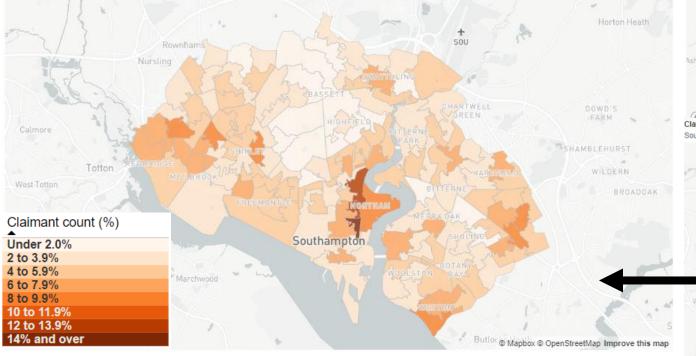


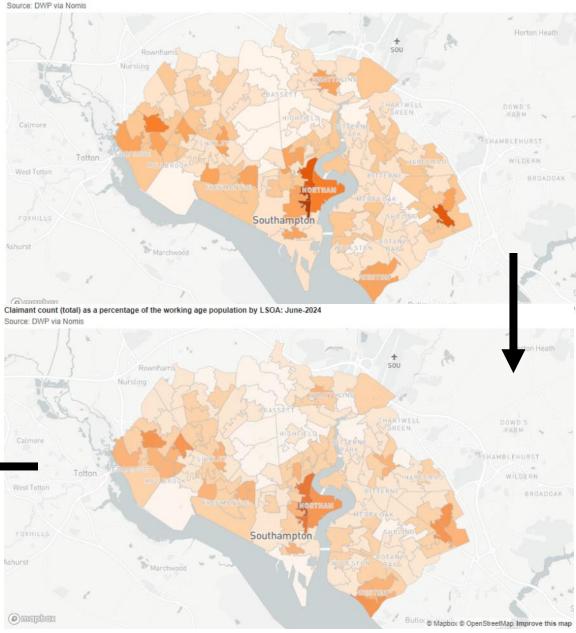
### **Claimant count**



Claimant count from March 2024 to September 2024 has remained fairly consistent. The areas with higher claimant counts are also areas with high levels of deprivation.

Claimant count (total) as a percentage of the working age population by LSOA: September-2024





Claimant count (total) as a percentage of the working age population by LSOA: March-2024