

Technical Analysis Paper



English Indices of Deprivation 2019

Introduction

The **English Indices of Deprivation 2019** was published by the Ministry of Housing, Communities and Local Government on 26 September 2019¹. It updates and replaces the Indices of Deprivation 2015. It has been produced using the same approach, structure and methodology used to create the previous Indices of Deprivation 2015. The existing domains (themed groups of indicators) and sub-domains have been retained, but changes to the data landscape have necessitated minor modifications to the basket of indicators used in some domains.

The Indices of Deprivation 2019 provide a set of relative measures of deprivation for small geographical areas across England, based on seven different domains, themed sets of indicators, of deprivation:

- Income Deprivation
- Employment Deprivation
- Education, Skills and Training Deprivation
- Health Deprivation and Disability
- Crime
- Barriers to Housing and Services
- Living Environment Deprivation

Each of these domains is based on a basket of indicators. As far as is possible, each indicator is based on data from the most recent time point available. The updated Indices continue to be based on the 2011 Lower-layer Super Output Area (LSOA) geography². There are 133 LSOAs in Camden and 32,844 altogether in England.

¹ Link to all national data and supporting documentation: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>. Link to data for Camden: <https://opendata.camden.gov.uk/People-Places/Indices-of-Deprivation-2019-Camden-Summary/mqe7-u9r7>

Key Findings

Local authority (LA) district summary measures

- **Camden is relatively less deprived in all of the summary measures** when compared to 2015 and 2010 indices.
- **Camden doesn't fall within the 40% most deprived LAs** on any of the summary measures.
- **Camden is most deprived** according to the **Rank of Average Rank** where it ranks 132nd/317.
- **Camden is least deprived** according to the **Rank of Most Deprived 10% of LSOAs** where it ranks 195th/317.

Index of Multiple Deprivation 2019 (IMD 2019)

- There are 133 LSOAs in Camden.
- **According to IMD 2019 no LSOAs in Camden fell within the 10% most deprived in England**, compared to 7 in the 2015 IMD and 3 in the 2010 IMD.
- **8 Camden LSOAs fall within the 15% most deprived LSOAs in England** compared to 21 in 2015.
- **22 Camden LSOAs fall within the 20% most deprived LSOAs in England** compared to 36 in 2015.
- **Income deprivation affecting children (IDACI) finds 12 LSOAs fall with 10% most deprived** in England.
- **Income deprivation affecting older people (IDAOP) finds 32 LSOAs fall with 10% most deprived** in England.

² LSOAs are homogenous small areas of relatively even population size containing approximately 1,500 people. Initially based on the 2001 Census, LSOAs were updated with the results of the 2011 Census. Although there were small changes across the country, Camden has had the same 133 LSOAs since 2001 which fit within current ward boundaries.

The Index of Multiple Deprivation 2019 is a combination of information from the seven domains to produce an overall relative measure of deprivation. The domains are given weightings and combined into the overall Index of Multiple Deprivation (IMD). In addition, there are two supplementary indices: the Income Deprivation Affecting Children Index (IDACI) and the Income Deprivation Affecting Older People Index (IDAOPI). The weightings for the domains is as follows:

- Income (22.5%)
- Employment (22.5%)
- Education, Skills and Training (13.5%)
- Health Deprivation and Disability (13.5%)
- Crime (9.3%)
- Barriers to Housing and Services (9.3%)
- Living Environment Deprivation (9.3%)

The full methodology and detail about the individual indicators contributing to the domains are provided in the MHCLGs *Technical Report*³ and helpful *Infographic*⁴.

The domain scores and overall IMD, IDACI and IDAOPI are ranked across the 32,844 English LSOAs to give each an individual ranking. The dataset provides the scores and ranking for each LSOA. A summary for Camden LSOAs can be downloaded from the Open Data Camden website⁵.

The Indices of Deprivation is specifically designed for use with the LSOA geography, enabling small hotspots of deprivation to be more easily identified that may otherwise remain hidden within a higher geography (e.g. local authority area or electoral ward). For this reason **it is best to analyse the Indices of Deprivation at LSOA level.** This can be done by tabular analysis, but is perhaps best expressed in the form of maps because the LSOA code has little meaning on its own. Some maps for Camden are presented below, which include ward boundaries to provide points of reference. A set of maps is available on the Open Data Camden website⁶.

That said, there are a set of summary measures which may be used to rank each local authority in England on a range of measures, including:

- **Rank of average rank** which summarises the average level of deprivation across an area, based on the population weighted **ranks** of all the LSOAs within it. For example, all LSOAs in a local authority, whether highly deprived or not so deprived, contribute to this summary measure. Overall, highly deprived areas and less-deprived areas will tend to average out in the overall rank, so **an area that is more uniformly deprived will tend to rank higher on this measure** compared to other summary measures.
- **Rank of average score** which summarises the average level of deprivation across an area, based on the **scores** of all the LSOAs contained within. Scores are calculated by taking the population-weighted average of the combined scores for the LSOAs in a larger area. This measure also covers the whole area including both deprived and less-deprived LSOAs. The main difference from the average rank measure is that more deprived LSOAs tend to have more 'extreme' scores than ranks, so highly deprived areas will not tend to average out in the same way as when using ranks. With scores, **highly polarised authorities will tend to score higher on the average score** measure than on the average rank.
- **Rank of proportion of LSOAs in the most deprived 10% nationally** which summarises the proportion of LSOAs in a larger area that are in the most deprived 10% of LSOAs in England. As such, **this measure is only focused on illustrating the number of LSOAs within a larger area which are the most deprived in England.** However, LSOAs just outside the 10% most deprived are not included as part of this measure, so large areas, such as local authorities, may not appear to be so deprived relative to others if they contain

³https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/833951/IoD2019_Technical_Report.pdf

⁴https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/833959/IoD2019_Infographic.pdf

⁵ <https://opendata.camden.gov.uk/People-Places/Indices-of-Deprivation-2019-Camden-Summary/mqe7-u9r7>.

⁶ <https://opendata.camden.gov.uk/People-Places/Camden-Indices-of-Deprivation-2019-Maps/8rca-w2p7>

zero or few of the most deprived LSOAs in the country.

- **Extent** which summarises the proportion of the local population that live in areas classified as among the most deprived in the country. The 'extent' measure uses a weighted measure of the population in the most deprived 30 per cent of all areas:
 - The population living in the most deprived 10% of LSOAs in England receive a 'weight' of 1.0;
 - The population living in the most deprived 11%-30% of LSOAs receive a sliding weight, ranging from 0.95 for those in the most deprived eleventh percentile, to 0.05 for those in the most deprived thirtieth percentile.

The higher-level areas are then ranked from most to least deprived, producing the 'rank of extent' summary measure.

- **Local concentration** which summarises how the most deprived LSOAs in the higher-level area compare to those in other areas in England. This measures the population-weighted average rank for the LSOAs that are ranked as most deprived in the higher-area, and that contain exactly 10% of the higher-area population.

The higher-level areas are ranked from most to least deprived, producing the 'rank of local concentration' summary measure.

The title of the Indices of Deprivation '2019' suggests that the data underpinning it is completely up-to-date, but in reality the name merely refers to the year the indices was produced, with much of the data that underpins the 2019 indices in fact relates to 2015 and 2016. This is particularly important because some large changes in the welfare system have taken place over the last 3-4 years, including the introduction of Universal Credit and won't be fully reflected in the data feeding into the 2019 indices.

Analysis of results

According to the Indices of Deprivation 2019 Statistical Release⁷: overall, 88 per cent of LSOAs that are in the most deprived decile (most deprived 10% of LSOAs) according to IMD 2019 were also the most deprived according to the IMD 2015.

- Deprivation is dispersed across England. 61% of local authority districts contain at least one of the most deprived LSOAs in England.
- Middlesbrough, Liverpool, Knowsley, Kingston upon Hull and Manchester are the local authorities with the highest proportions of LSOAs among the most deprived in England. This is largely unchanged from the IMD2015.
- Many London boroughs have seen a reduction in the proportions of their LSOAs that are highly deprived.
- Seven of the 10 local authority districts with the highest levels of income deprivation among older people are in London – this is unchanged from the IMD2015.

Local authority district summary measures

The district summary measures provide an overall ranking out of 317 local authority areas:

Camden is relatively less deprived in all of the summary measures when compared to both the 2015 and 2010 indices. Comparing 2019 to 2015 specifically by measure:

- Camden is most marked in the **LSOAs falling within the 10% most deprived** where it's ranking has changed from 131st to 195th (-64 places).
- On the **Rank of average rank**: Camden now ranks 132nd where it previously ranked 69th in 2015 (-63 places).
- By the **Extent** measure: Camden ranks 139th in 2019 compared to 80th in 2015 (-59 places).
- On the **Rank of average score**: Camden now ranks 138th where it previously ranked 84th in 2015 (-54 places).
- **Local concentration**: Camden ranks 167th compared to 131st in 2015 (-36 places).

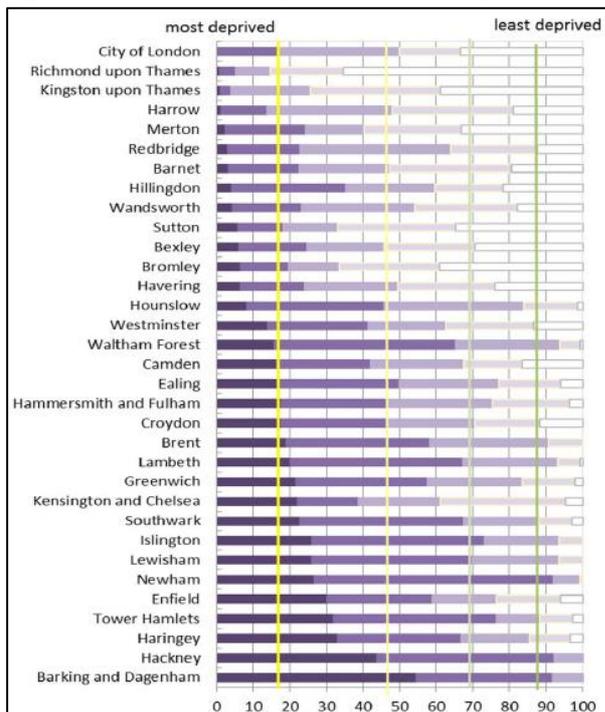
⁷https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835115/IoD2019_Statistical_Release.pdf

- Camden does not fall within the 40% most deprived districts in England on any of the five summary measures.

Within London

Camden as a whole ranks as average for a London borough. In Figure 1 below, Camden is seen as ranking 17th most deprived borough in London according to IMD quintiles, ranked according to the number of LSOAs within 20% most deprived in England.

Figure 1. London boroughs by IMD 2019 quintiles



Source: IMD 2019, © MHCLG Crown Copyright, 2019.

Camden LSOA analysis

As already stated, the aim of the Indices is designed to highlight hotspots of deprivation found in small areas using the LSOA geography. Camden has 133 LSOAs.

The most deprived LSOAs in Camden according to the IMD 2019 fall within the 12%-15% most deprived LSOAs in England (refer to Table 1). The table provides some information about the severity of deprivation within

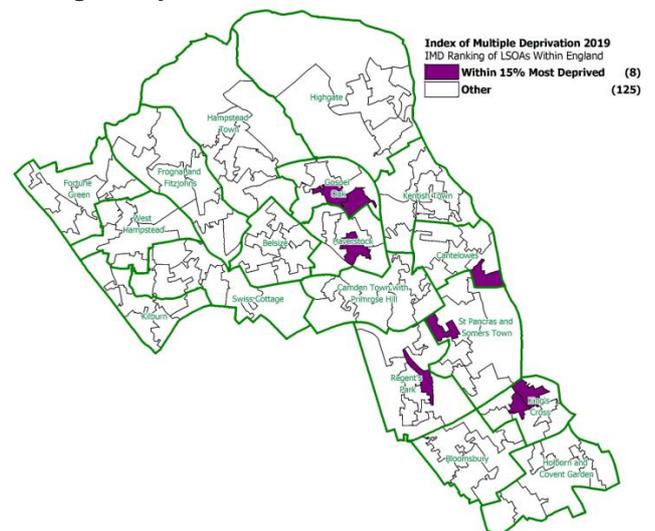
Camden by the LSOAs ranking within England and by which ward it occurs.

Table 1. Camden LSOAs Within 15% Most Deprived in England by Index of Multiple Deprivation (IMD) 2019

| LSOA | Ward | Most Deprived in England (%) |
|-----------|----------------------------|------------------------------|
| E01000890 | Gospel Oak | 12.2% |
| E01000950 | Regent' Park | 13.2% |
| E01000868 | Canteloves | 13.7% |
| E01000939 | King's Cross | 13.8% |
| E01000959 | St Pancras and Somers Town | 13.9% |
| E01000891 | Gospel Oak | 14.6% |
| E01000905 | Haverstock | 14.8% |
| E01000941 | King's Cross | 14.8% |

As spatial information it is useful to see this information displayed as a map. Figure 2 shows the same information on a map of Camden (wards included for context).

Figure 2. Camden LSOAs Within 15% Most Deprived in England by IMD 2019



Source: Indices of Deprivation 2019, © MHCLG, 2019⁸.

- 8 Camden LSOAs fall within the 15% most deprived LSOAs in England (compared to 21 in 2015).
- 22 Camden LSOAs fall within the 20% most deprived LSOAs in England (compared to 36 in 2015).
- 37 Camden LSOAs fall within the 30% most deprived LSOAs in England (compared to 55 in 2015).

⁸ Borough and Ward boundaries and StreetView are based upon Ordnance Survey material and are reproduced with the permission of Ordnance Survey on behalf of the Controller of HMSO ©. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

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By individual domain and sub-domains

- The **Living Environment** domain has the most deprived LSOAs which fall within the 10% most deprived in England (19)
- The **Health Deprivation & Disability; Education, Skills & Training; and Barriers to Housing & Services** domains have no LSOAs which fall within the 10% most deprived in England.
- The **Income Deprivation Affecting Children Index (IDACI)** shows 13 (9.8%) Camden LSOAs falling within the 10% most deprived in England.
- The **Income Deprivation Affecting Older People Index (IDAOPI)** shows 32 (24.1%) Camden LSOAs falling within the 10% most deprived in England.

Using the Indices of Deprivation 2019 data

Because of the method of construction of the indices and the creation of relative rankings across England there are some things that you can and cannot derive from the indices:

What you can use the data for ...

- Comparing LSOAs across England.
- Identifying the most deprived LSOAs.
- Exploring types of deprivation (domains).
- Looking at changes in **relative** deprivation between series, i.e. changes in ranks.
- To determine where to target initiatives and interventions or site programmes.
- To develop strategies.
- To apply for and/or to distribute funding.

What you can't use the data for/or can't do:

- Quantifying how deprived an LSOA is, i.e. is one LSOA twice as deprived as another.
- Showing that an LSOA is more or less deprived than previously.
- Telling if people from one LSOA suffer more (e.g. from crime) than suffer from (e.g. living environment).
- It can't tell you about individuals or households.
- It can't tell whether people in an LSOA are subject to multiple deprivations.

- It can't tell if the same people are present in the same LSOA in different releases.
- It can't tell how affluent an LSOA is.

Using the overall IMD and the domains

MHCLG are keen to encourage people to use the overall Index of Multiple Deprivation (the weighted combined index), but also strongly suggest that users explore the individual domains and use them, i.e. to use the most appropriate domain for the job in hand. Examples might include using the Income Deprivation Affecting Children Index (IDACI) sub-domain when looking at child poverty.

Geographic Analysis

Spatial analysis of deprivation according to the Indices of Deprivation 2019 using the 2011 LSOA geography reveals the patterns of deprivation across Camden. This data is best displayed by maps using graduated shading to show the range of deprivation ranks. See a selection in Figs.2-5 below and see Open Data Camden link⁹ for a full set.

A full LSOA map overview for England can be seen on the Gov.UK Indices of Deprivation portal¹⁰.

Further Information and links

Summary analysis of the Camden data (Excel): <https://opendata.camden.gov.uk/People-Places/Indices-of-Deprivation-2019-Camden-Summary/mge7-u9r7>.

Full set of IMD and domain maps for Camden: <https://opendata.camden.gov.uk/People-Places/Camden-Indices-of-Deprivation-2019-Maps/8rca-w2p7>

Advice about *the Indices of Deprivation 2019* data for Camden, email population@camden.gov.uk.

General information, guidance and data <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>.

⁹ <https://opendata.camden.gov.uk/People-Places/Camden-Indices-of-Deprivation-2019-Maps/8rca-w2p7>

¹⁰ <https://www.gov.uk/guidance/english-indices-of-deprivation-2019-mapping-resources#indices-of-deprivation-2019-explorer-postcode-mapper>

Figure 2. Camden LSOAs within the 30% Most Deprived LSOAs in England: Rank of IMD

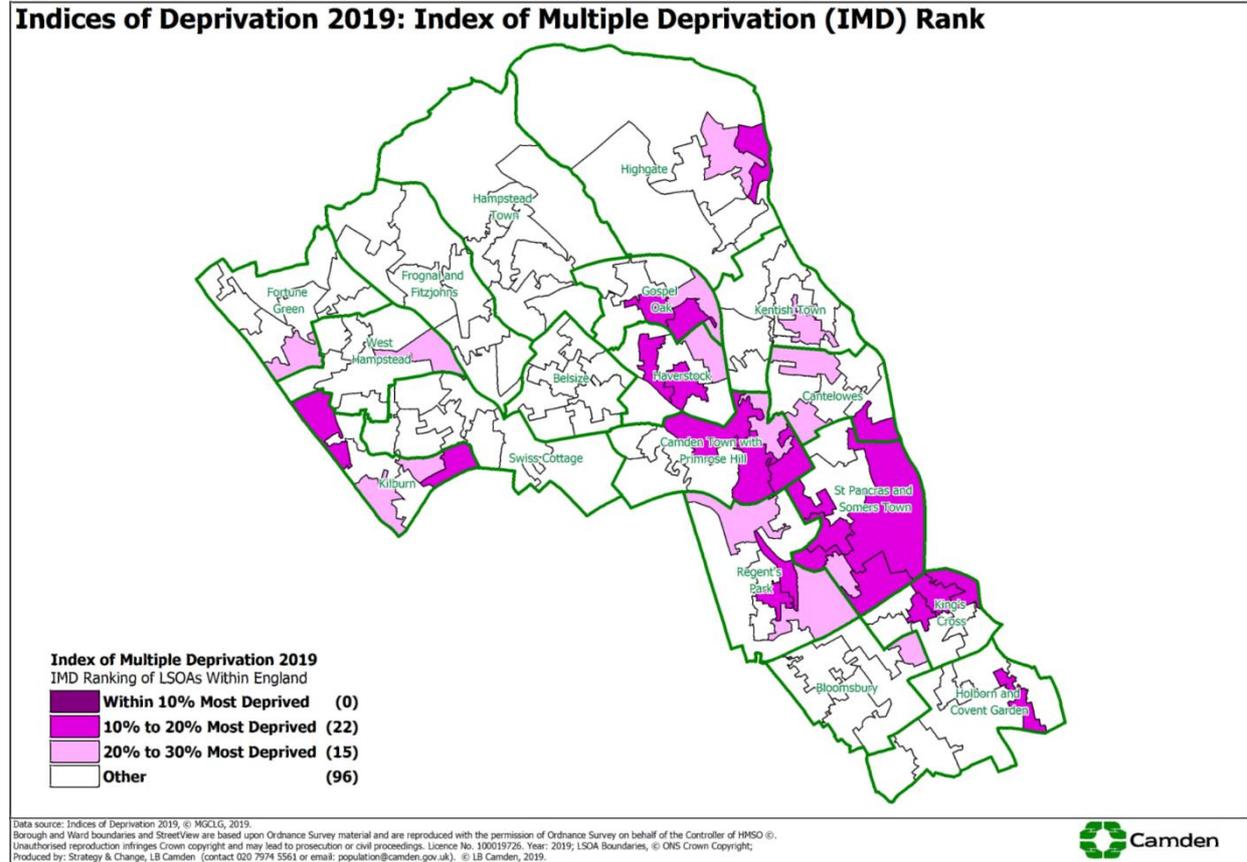


Figure 3. Camden LSOAs within the 30% Most Deprived LSOAs in England: Rank of income Deprivation

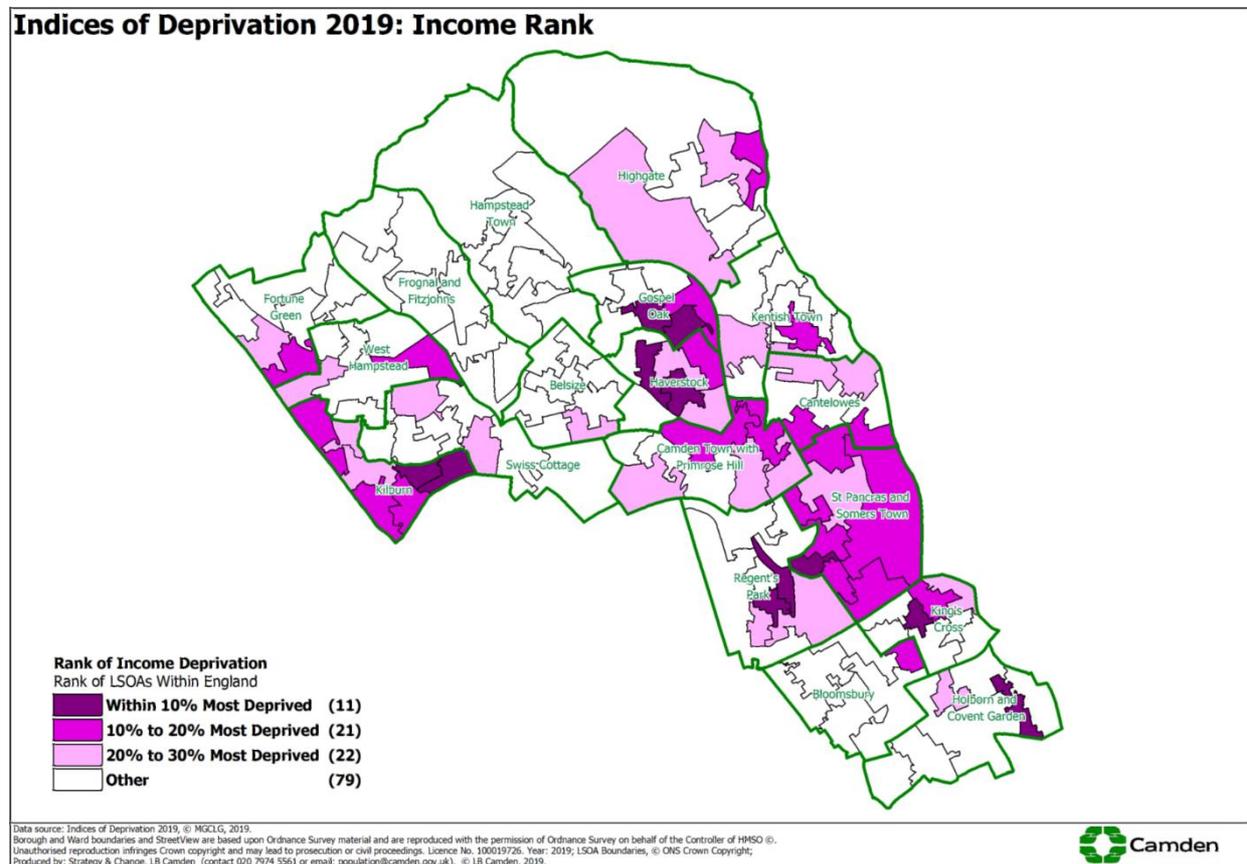


Figure 4. Camden LSOAs within the 30% Most Deprived LSOAs in England: Rank of Income Deprivation Affecting Children Index (IDACI)

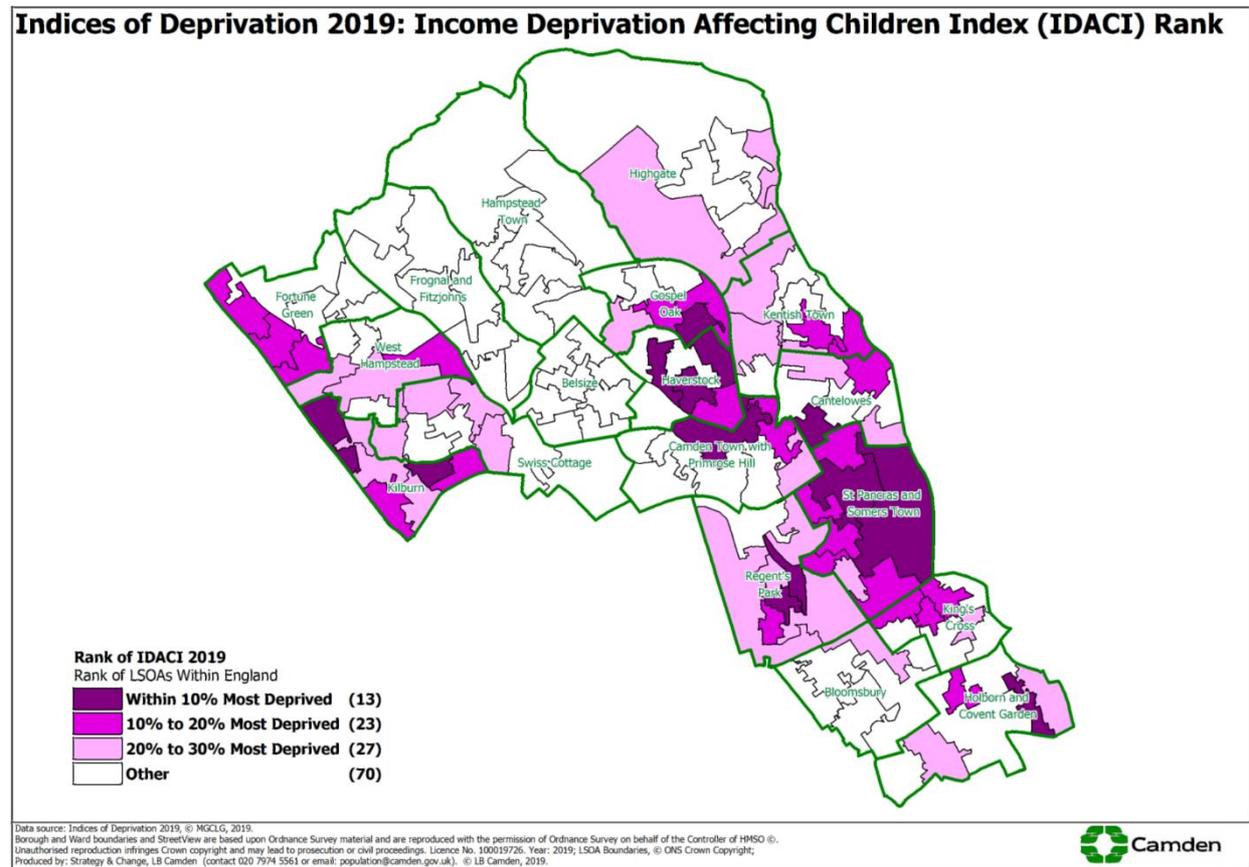


Figure 5. Camden LSOAs within the 30% Most Deprived LSOAs in England: Rank of Income Deprivation Affecting Older People Index (IDAOP)

