

The English Indices of Deprivation (IoD)

Index of Multiple Deprivation (IMD)

Published September 2019

Aim

To present the latest English Indices of Deprivation (IoD)'s Index of Multiple Deprivation (IMD) scores with a focus on Cumbria and the county's districts. The analysis presented is based on the English Indices of Deprivation 2019 (IoD 2019) which were constructed for the Ministry of Housing, Communities and Local Government (MHCLG) by Oxford Consultants for Social Inclusion (OCSI) and Deprivation.org.

Key Headlines

The IoD 2019 reported that:

- Cumbria's average IMD score ranked 83rd nationally out of 151 upper tier local authorities (with 1 being the most deprived authority);
- Cumbria was on the 55th percentile nationally for average IMD score (suggesting that 55% of local authorities were more deprived than Cumbria);
- Cumbria has become more deprived relative to other local authorities since 2015 (in 2015 Cumbria was on the 57th percentile nationally for average IMD score, a decline of 2 percentage points);
- Barrow-in-Furness was the most deprived Cumbrian district (on the 10th percentile nationally for average IMD score, a relative improvement from 9th percentile in 2015);
- Although Copeland was the 2nd most deprived Cumbrian district, it has become much less deprived relative to other local authorities since 2015 (moving from the 22nd percentile in 2015 to the 27th percentile in 2019);
- 8.1% of Cumbria's (26 out of 321) LSOAs sat within IMD Decile 1 (the most deprived 10% of LSOAs nationally);
- Cumbria was on the 45th percentile nationally for the proportion of LSOAs in IMD Decile 1 (moving from 43rd percentile in 2015, a relative improvement of 2 percentage points);
- All of the Cumbrian LSOAs within IMD Decile 1 were located within the districts of Allerdale, Barrow-in-Furness, Carlisle and Copeland;
- Cumbria's most deprived LSOA sits in the south west of Barrow's 'Central' ward.
- Of Cumbria's districts, Barrow-in-Furness had the greatest proportion of LSOAs in IMD Decile 1 (on the 9th percentile, the same percentile as 2015);
- 6.1% of LSOAs in Copeland sat within IMD Decile 1 (a large relative improvement from to 12.2% in 2015, moving from the 22nd percentile to the 35th percentile).

Background

The Indices of Deprivation (IoD) consider the unmet needs of small geographical areas, known as Lower Super Output Areas (LSOAs), caused by a lack of resources. The IoD measure, as accurately as possible, the relative distribution of deprivation across the 32,844 LSOAs in England based on 39 separate indicators, organised across the following seven domains:

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

Two supplementary indices have also been produced: the Income Deprivation Affecting Children Index (IDACI); and the Income Deprivation Affecting Older People Index (IDAOPI).

The domains of deprivation are combined and weighted to calculate an overall Index of Multiple Deprivation (IMD) score for each LSOA; so that all LSOAs in England can be ranked according to their overall level of deprivation relative to other LSOAs. High ranking LSOAs can be referred to as the 'most deprived' or as being 'highly deprived' to aid interpretation. However, there is no definitive threshold above which an area is described as 'deprived'. The IMD measure deprivation on a relative rather than an absolute scale, so an LSOA ranked 100th is more deprived than an LSOA ranked 200th, but this does not mean it is twice as deprived.

The purpose of the IMD is to provide the best measure of the distribution of relative deprivation at a snapshot in time. However, this comes at the expense of 'backwards' comparability. Although there have been previous releases of the IoD (2004, 2007, 2010 and 2015) based on broadly the same methodology as the IoD 2019, some changes have been made to the indicators over time. Therefore, care should be taken when comparing iterations of the IoD over time as iterations of the IoD cannot be used to identify real change over time.

Keeping a consistent methodology does allow relative rankings between iterations to be compared over time; for example, an LSOA can be said to have become more deprived relative to other areas if it was within the most deprived 20 per cent of LSOAs nationally according to the IMD 2015 and within the most deprived 10 per cent according to the IMD 2019. However, it would not be correct to state that the level of deprivation in the LSOA has increased on some absolute scale, as it may be the case that all LSOAs have improved, but that this LSOA improved more slowly than other areas and so was 'overtaken' by other LSOAs.

Index of Multiple Deprivation (IMD) 2019

Average IMD Score

The 2019 IoD report that Cumbria's average IMD score was 21.3; ranking the county 83rd nationally out of 151 upper tier local authorities (with 1 being the most deprived authority). This places Cumbria on the 55th percentile nationally; suggesting that 55% of upper tier local authorities are more deprived than Cumbria.

In 2015 Cumbria's average IMD score was also 21.3. However, this ranked the county 86th nationally out of 152 upper tier local authorities; placing Cumbria on the 57th percentile nationally (suggesting that 57% of upper tier local authorities were more deprived than Cumbria). This would suggest that between 2015 and 2019 Cumbria has on average become more deprived relative to other upper tier local authorities (by 2 percentage points).

Figure 1 presents the average IMD score, national rank of the average IMD score and percentile of the national rank of the average IMD score for Cumbria and each of the county's districts in relation to both 2015 and 2019.

Figure 1: Average IMD Score with National Ranks and Percentiles: Cumbria and Districts:

	Index of Multiple Deprivation (IMD)								
	2015				2019				2015-2019
	Average score	National Rank of average score	No. LAs	Percentile (National Rank of average score / No. LAs)	Average score	National Rank of average score	No. LAs	Percentile (National Rank of average score / No. LAs)	Percentage Points Change in Percentile
Cumbria	21.3	86	152 (Upper Tier)	57	21.3	83	151 (Upper Tier)	55	-1.6
Allerdale	22.6	115	326 (Lower Tier)	35	22.9	104	317 (Lower Tier)	33	-2.5
Barrow-in-Furness	31.4	29		9	31.1	31		10	+0.9
Carlisle	22.5	116		36	22.0	117		37	+1.3
Copeland	25.9	72		22	25.0	85		27	+4.7
Eden	15.4	200		61	16.3	186		59	-2.7
South Lakeland	12.2	258		79	12.5	250		79	+0.3

Source: English Indices of Deprivation (IoD)

Of Cumbria's districts, Barrow-in-Furness had the highest average IMD score in 2019; ranking 31st most deprived nationally (out of 317 lower tier local authorities), placing it on the 10th percentile. Barrow-in-Furness also had the highest average IMD score in 2015. However, in 2015 the district ranked 29th most deprived nationally (out of 326 lower tier local authorities in England), placing it on the 9th percentile. This would suggest that between 2015 and 2019, Barrow-in-Furness has become marginally less deprived relative to other lower tier LAs nationally (+0.9 percentage points).

Furthermore, in 2019 Copeland had the second highest average IMD score in Cumbria; ranking 85th most deprived nationally (27th percentile). In 2015 Copeland also had the second highest average IMD score. However, the district ranked 72nd most deprived nationally (22nd percentile); suggesting that between 2015 and 2019, Copeland has become much less deprived relative to authorities nationally (+4.7 percentage points).

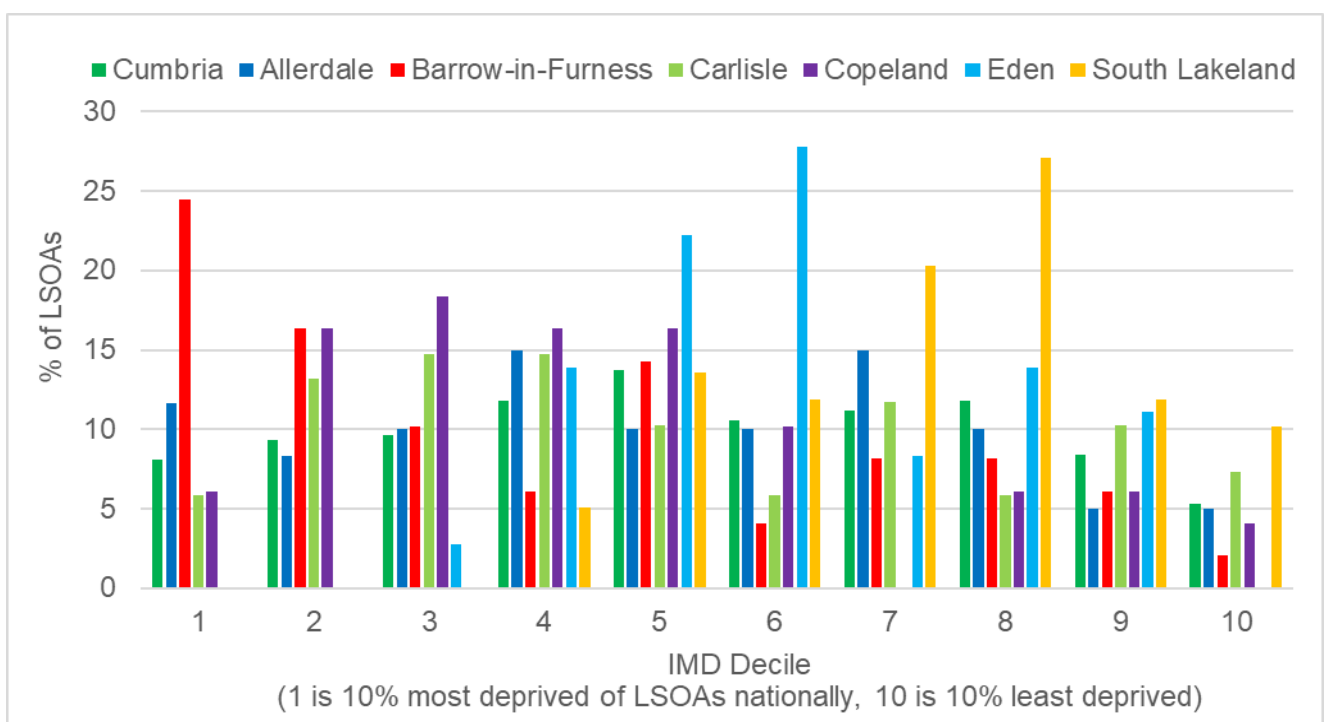
Inversely, in 2019 South Lakeland and Eden had the two lowest average (least deprived) IMD scores in Cumbria; respectively ranking 250th and 186th nationally (79th and 59th percentiles). While South Lakeland was also on the 79th percentile in 2015, Eden previously placed on the 61st percentile in 2015; suggesting that Eden has become slightly more deprived relative to other authorities nationally (-2.7 percentage points).

While the 2019 IMD reported that South Lakeland and Eden were the two least deprived district in Cumbria, it should be noted that there are some specific IoD deprivation domains in which these districts do rank amongst some of the most deprived nationally; these domains can be explored via the Cumbria Intelligence Observatory (see the further information section).

LSOAs by Decile

Figure 2 plots the proportion of LSOAs in Cumbria and each of the county's districts within each IMD decile in relation to IMD 2019; with IMD Decile 1 relating to those LSOAs in the 10% most deprived of LSOAs nationally and IMD Decile 10 relating to those LSOAs in the 10% least deprived of LSOAs nationally.

Figure 2: Proportion of LSOAs by IMD Decile: Cumbria and Districts: 2019:



Source: English Indices of Deprivation (IoD)

The 2019 IoD reported that Cumbria's 321 LSOAs are spread fairly evenly across IMD Deciles, with the greatest proportion falling within Decile 5 (44 LSOAs, 13.7%). Furthermore, the proportions of Cumbria's LSOAs within the three most and least deprived deciles are very similar; 27.1% in the three most deprived deciles (deciles 1, 2 and 3) and 25.5% in the three least deprived deciles (deciles 8, 9 and 10).

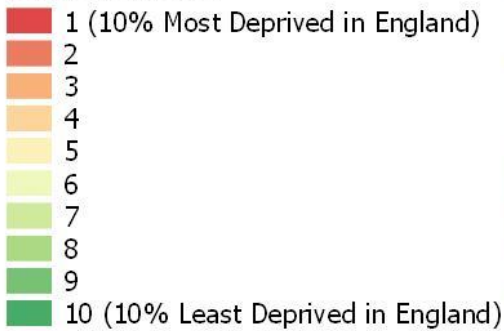
However, there is a great deal of variation at district level. 51% of Barrow-in-Furness's LSOAs sit in the three most deprived deciles, while just 16.3% of the district's LSOAs sit within the three least deprived deciles. Inversely, none of South Lakeland's LSOAs sit in the three most deprived deciles, while 49.2% of the district's LSOAs sit in the three least deprived deciles.

Figure 3 plots each of Cumbria's 321 LSOAs shaded according to their IMD deciles; areas shaded in red represent LSOAs that are in IMD Decile 1 (the 10% most deprived LSOAs in England), while areas shaded in dark green represent LSOAs that are in IMD Decile 10 (the 10% least deprived LSOAs in England).

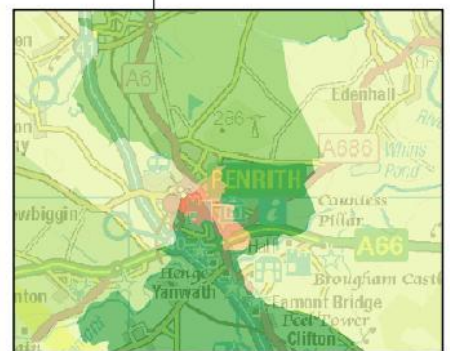
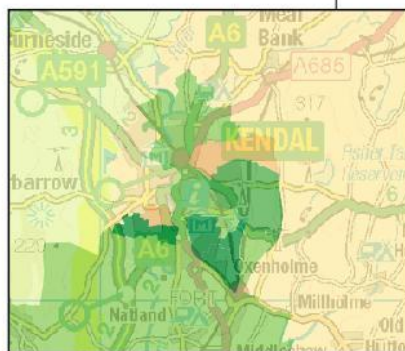
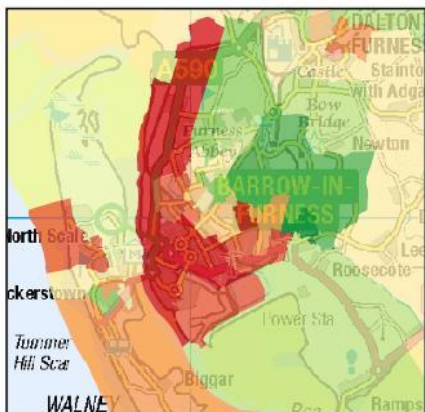
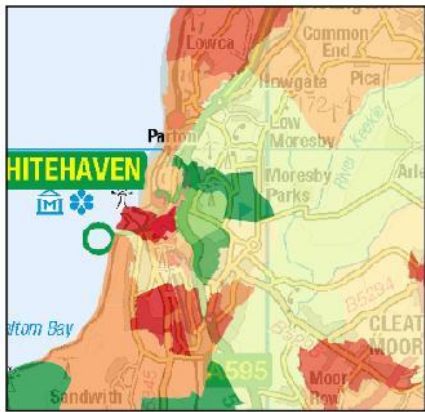
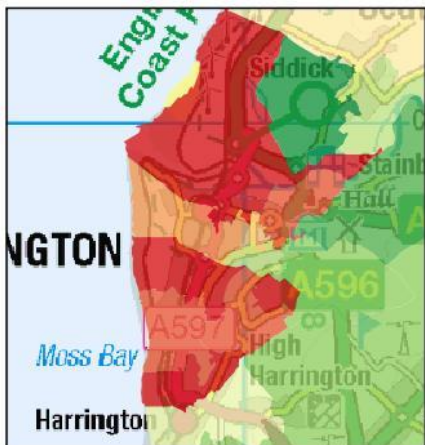
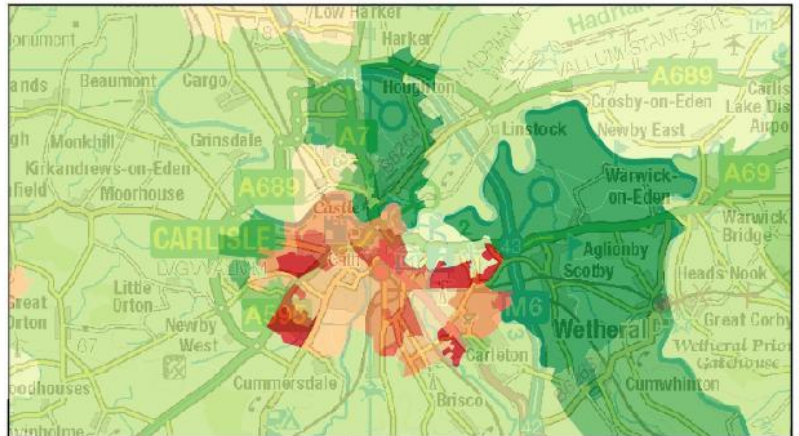
Figure 3:

LSOAs by Overall Deprivation Decile

Deprivation Decile



Source: DCLG 2019



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LSOAs in the Most Deprived IMD Decile (IMD Decile 1)

Figure 4 plots the proportion of LSOAs in Cumbria and each of the county's districts that fall within the most deprived IMD decile (IMD Decile 1) in relation to 2015 and 2019.

Figure 4: Proportion of LSOAs in IMD Decile 1 (10% Most Deprived LSOAs Nationally):

	Index of Multiple Deprivation (IMD)								2015-2019
	2015				2019				
	No. LSOAs in most deprived 10% nationally	Proportion of LSOAs in most deprived 10% nationally	Rank of proportion of LSOAs in most deprived 10% nationally	Percentile (Rank / No. LAs)	No. LSOAs in most deprived 10% nationally	Proportion of LSOAs in most deprived 10% nationally	Rank of proportion of LSOAs in most deprived 10% nationally	Percentile (Rank / No. LAs)	
Cumbria	29	9.0%	66	43	26	8.1%	68	45	2
Allerdale	7	11.7%	79	24	7	11.7%	76	24	0
Barrow-in-Furness	11	22.5%	29	9	12	24.5%	27	9	0
Carlisle	5	7.4%	112	34	4	5.9%	115	36	2
Copeland	6	12.2%	73	22	3	6.1%	112	35	13
Eden	0	0.0%	200	61	0	0.0%	195	62	0
South Lakeland	0	0.0%	200	61	0	0.0%	195	62	0

Source: English Indices of Deprivation (IoD)

From 2015 to 2019 the proportion of Cumbrian LSOAs in IMD Decile 1 decreased (improved) relative to other authorities; with 8.1% (26) of Cumbria's LSOAs in IMD Decile 1 in 2019 (45th percentile compared to 9% (29) of Cumbria's LSOAs in IMD Decile 1 in 2015 (43rd percentile).

Of Cumbria's districts, Barrow-in-Furness had the greatest proportion of LSOAs in IMD Decile 1 in 2015 and 2019 (22.5% in 2015 vs. 24.5% in 2019). In both years these proportions placed the district on the 9th percentile; suggesting there has been no change relative to other authorities nationally.

In contrast, in 2019 6.1% of LSOAs in Copeland were in IMD Decile 1 compared to 12.2% in 2015; moving the district from the 22nd percentile to the 35th percentile. While this again suggests that Copeland has become less deprived relative to other authorities, it should be noted that the three specific LSOAs in Copeland that moved out of Decile 1 between 2015 and 2019 still remained within IMD Decile 2 in 2019 (20% most deprived areas).

All of the 26 Cumbrian LSOAs that ranked within IMD Decile 1 in 2019 were located within the districts of Allerdale, Barrow-in-Furness, Carlisle and Copeland, with the most deprived LSOA in the county found in the south west of Barrow's 'Central' ward. Figure 5 lists the 26 LSOAs within the IMD Decile 1 in 2019 descending from most deprived.

Figure 5: Cumbria: LSOAs within IMD Decile 1 (10% most deprived LSOAs in England):

LSOA Name	2019 IMD National Rank (out of 32,844, 1 is most deprived)	2019 IMD Decile	LSOA Local Name*
Barrow-in-Furness 008C	99	1	Central: South West
Barrow-in-Furness 004A	204	1	Hindpool: West Central
Barrow-in-Furness 010B	213	1	Barrow Island: West
Barrow-in-Furness 007A	324	1	Central: East
Copeland 005F	451	1	Sandwith: North East
Barrow-in-Furness 008A	522	1	Central: North West
Allerdale 009C	620	1	Moss Bay: North
Barrow-in-Furness 004C	645	1	Ormsgill: North
Barrow-in-Furness 008B	695	1	Central: Central
Allerdale 005B	723	1	Ewanrigg: North
Barrow-in-Furness 008D	836	1	Hindpool: South East
Copeland 002B	943	1	Harbour: North
Carlisle 009A	1110	1	Belle Vue: South East
Carlisle 011F	1157	1	Upperby: East
Barrow-in-Furness 008E	1301	1	Hindpool: Central
Allerdale 009E	1912	1	St. Michael's: Central
Allerdale 009B	2005	1	Moss Bay: South
Copeland 005D	2144	1	Mirehouse: Central
Allerdale 010C	2380	1	Moorclose: East
Carlisle 009D	2423	1	Morton: South
Barrow-in-Furness 007E	2524	1	Risedale: West
Allerdale 008C	2530	1	St. Michael's: North & East
Barrow-in-Furness 007B	2708	1	Newbarns: South West
Barrow-in-Furness 004D	3002	1	Ormsgill: Central
Carlisle 011A	3082	1	Botcherby: Central
Allerdale 005A	3268	1	Ellenborough: South

Source: English Indices of Deprivation (IoD) 2019. *LSOA Local Names were created by Cumbria Intelligence Observatory based on 2001 Census wards and the LSOA's geographical location in that 2001 Census ward. Note that 2001 Census wards no longer exist due to boundary changes, so current wards do not match up to LSOAs.

24 of the 26 Cumbrian LSOAs in IMD Decile 1 in 2019 also sat within IMD Decile 1 in 2015; the two exceptions were Allerdale 010C (Moorclose: East) and Barrow-in-Furness 004D (Ormsgill: Central) which both sat in IMD Decile 2 in 2015. Additionally, the following five LSOAs that sat in IMD Decile 1 in 2015 no longer featured in IMD Decile 1 in 2019 (with all having moved to IMD Decile 2 in 2019):

- Copeland 004H (Frizington: North East);
- Copeland 004F (Cleator Moor South: North);
- Allerdale 009A (Moss Bay: Central);
- Carlisle 012E (Upperby: North West); and
- Copeland 004B (Cleator Moor North: East).

Further Information

A 2019 deprivation profile of Cumbria including individual IoD domains can be found here:

- <https://www.cumbriaobservatory.org.uk/deprivation/>

2019 Deprivation profiles for each of Cumbria's districts, wards and other geographies can be found here:

- <https://www.cumbriaobservatory.org.uk/deprivation/report/view/0a283b3728e54965b9d5ce9a26c3b761/E07000026>

Interactive maps of the 2019 IoD relating to Cumbria can be found here:

- <https://www.cumbriaobservatory.org.uk/deprivation/map/>

Additional information about the IoD can be found at:

- <https://www.gov.uk/government/collections/english-indices-of-deprivation>

Finally, for the first time the MHCLG have also produced online mapping resources, interactive tools and Open Data facilities to aid user's exploration of the English indices of deprivation 2019, which can be found here:

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

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