

Multiple Deprivation in England, 2004 to 2025



deprivation.org

Research to support the eradication of poverty and deprivation



Chris Lloyd

Queen's University Belfast

c.lloyd@qub.ac.uk

Co-investigators:

Sara Ferguson (QUB)

Gemma Catney (QUB)

Paul Norman (University of Leeds)

David McLennan (deprivation.org)

Michael Noble (deprivation.org)

Rationale

- Deprivation measures crucial in development and implementation of policies to help disadvantaged communities
- Multiple deprivation indices official measures of deprivation across the four UK nations
- Funding allocated based upon a single time point
- Likely success of interventions determined by the **deprivation history** and **trajectory** of an area - **most recent measures are not enough**
- Success of schemes should be assessed by measuring changes in deprivation over time

Presentation structure

- Data
- Introduction to 2025 IoD
- IoD 2025 deciles by region and LAs
- IoD 2025 area classification
- IoD 2004 to IoD 2025
- Trajectory classifications
- Data resources
- Other project outputs
- Next steps

Data

- Data made consistent to enable comparisons across time
- LSOA 2001 and 2011 transferred to LSOA 2021 using overlay and postcodes to assign ranks using median weighting
- Indices of Deprivation (IoDs) for 2004, 2007, 2010, 2015, 2019, and 2025 (seven domains including income and employment)
- Classification of changing IoD values to show areas with, for example, persistently high deprivation or decreasing deprivation values
- Update of previous analyses including the IoD 2025 following release on 30th October

IoD 2025

As previously, seven domains with weights:

Income Deprivation Domain (Inc) 22.5%

Employment Deprivation Domain (Emp) 22.5%

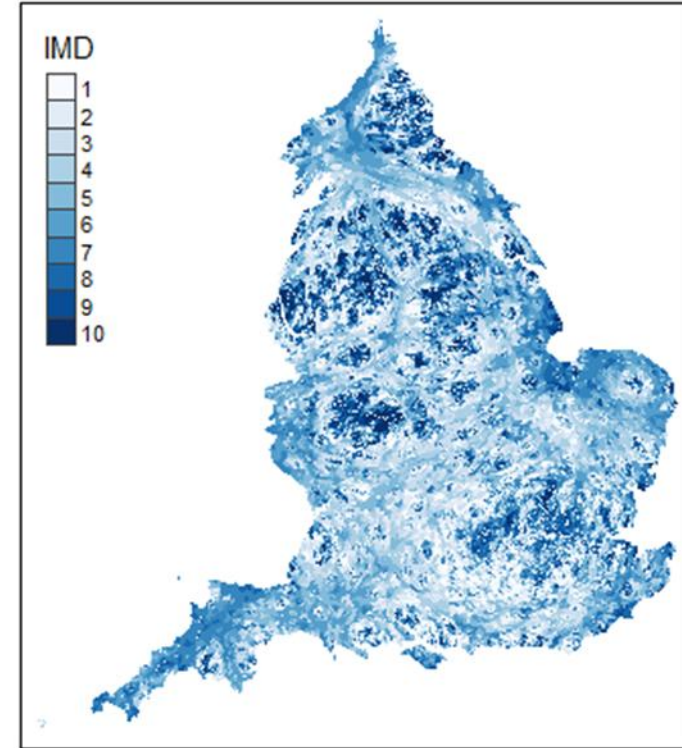
Health Deprivation and Disability Domain (Hea) 13.5%

Education, Skills and Training Deprivation Domain (Edu) 13.5%

Barriers to Housing and Services Domain (Bar) 9.3%

Crime Domain (Cri) 9.3%

Living Environment Deprivation Domain (Liv) 9.3%



Since 2019 notable changes to several domains with new indicators for domains including Crime, Barriers to Housing and Services, and Living Environment.

The income threshold and assessment is based, for the first time, on an After Housing Costs (AHC) approach and this will have an impact on the differences between 2019 and 2025 scores on the Income domain.

The approach to shrinkage is now based on LA-OA Classification parents rather than LAs alone.

Cartogram of
IoD 2025
deciles, where
10 = most
deprived 10%

IoD 2019 – IoD 2025 deciles

Number of LSOAs in each IMD2019 (rows) and IMD2025 (columns) decile.

			2025									
		Dec	1	2	3	4	5	6	7	8	9	10
2019	1	1	2414	726	191	34	9	2	1	0	0	0
	2	2	790	1422	820	279	52	10	1	0	0	0
	3	3	135	935	1278	746	225	44	13	0	1	0
	4	4	18	232	773	1280	805	228	35	3	1	0
	5	5	8	44	241	785	1309	793	175	18	2	0
	6	6	6	6	45	186	766	1368	819	164	14	1
	7	7	2	2	16	39	176	770	1470	796	98	6
	8	8	2	6	10	16	25	136	767	1682	684	49
	9	9	1	2	1	9	6	21	87	681	2031	535
	10	10	0	0	1	1	3	3	7	32	544	2785

% of LSOAs in Top IoD decile by region

Region	IMD	Inc	Emp	Hea	Edu	Bar	Cri	Liv
East Midlands	8.22	7.55	8.96	9.13	11.91	8.57	8.89	7.97
East of England	3.86	4.28	3.51	2.77	7.42	11.44	5.35	5.00
London	4.02	10.27	2.72	0.98	0.48	19.14	4.12	14.04
North East	21.46	17.84	25.80	34.19	16.11	3.15	21.88	8.74
North West	20.21	17.30	20.10	25.60	14.56	4.69	17.34	14.76
South East	3.32	2.60	3.41	2.37	5.60	10.73	6.21	3.55
South West	3.90	2.85	4.31	3.55	6.22	14.50	5.25	11.89
West Midlands	16.06	17.07	16.65	11.78	15.72	6.30	9.57	9.60
Yorkshire and The Humber	18.48	16.24	16.96	16.24	21.22	4.83	20.54	14.69

2025

Region	IMD	Inc	Emp	Hea	Edu	Bar	Cri	Liv
East Midlands	8.25	8.29	8.96	9.38	13.77	4.95	5.30	4.07
East of England	3.62	3.38	3.43	3.19	7.24	10.88	5.08	3.89
London	2.16	6.03	1.90	0.42	0.26	29.60	8.33	9.87
North East	19.92	21.22	26.58	28.66	15.81	2.02	17.66	1.13
North West	21.76	20.14	22.09	28.66	14.14	1.99	18.13	15.46
South East	3.09	2.62	2.80	2.01	5.91	8.74	6.10	6.14
South West	4.84	4.05	5.14	4.67	6.22	8.86	5.55	13.71
West Midlands	16.23	17.01	14.89	10.55	14.75	9.04	5.60	16.23
Yorkshire and The Humber	19.40	16.18	17.23	15.77	21.43	3.31	22.77	15.11

2019

% of LSOAs in Top IoD decile by LA

LA	IMD	Inc	Emp	Hea	Edu	Bar	Cri	Liv
Middlesbrough	50.00	45.56	46.67	57.78	44.44	0.00	54.44	13.33
Birmingham	42.94	44.76	40.82	25.64	28.98	3.19	20.94	18.66
Hartlepool	42.11	40.35	49.12	54.39	24.56	0.00	35.09	14.04
Kingston upon Hull	41.67	35.12	37.50	37.50	42.26	0.60	41.67	16.07
Manchester	40.68	37.97	32.20	46.44	10.51	31.19	38.98	13.56
Blackpool	40.43	29.79	41.49	58.51	29.79	0.00	37.23	34.04
Burnley	40.00	31.67	26.67	40.00	28.33	1.67	33.33	43.33
Knowsley	40.00	29.00	46.00	57.00	39.00	0.00	12.00	0.00
Blackburn with Darwen	37.36	38.46	31.87	35.16	34.07	4.40	28.57	30.77
Oldham	37.32	33.10	27.46	23.24	28.17	9.86	27.46	19.01

Top ten LAs with largest shares by IMD

Ten LSOAs with the highest IMD rank

Isoa21nm	IMD25	Inc25	Emp25	Hea25	Edu25	Bar25	Cri25	Liv25
Tendring 018A	1.000	0.998	1.000	0.999	0.999	0.951	1.000	0.993
Blackpool 010E	1.000	1.000	1.000	1.000	0.997	0.524	1.000	1.000
Blackpool 010A	1.000	1.000	1.000	1.000	1.000	0.583	1.000	0.992
Blackpool 013A	1.000	0.997	0.999	0.998	0.999	0.532	1.000	0.999
Blackpool 011A	1.000	0.999	0.999	0.996	0.999	0.530	0.998	0.979
Blackpool 008D	1.000	0.998	0.999	0.999	0.998	0.455	0.999	0.953
Hastings 005A	1.000	0.998	0.999	0.995	0.996	0.999	0.989	0.072
Blackpool 006B	1.000	0.999	1.000	1.000	0.987	0.179	0.999	0.981
Blackpool 008B	1.000	0.996	0.999	0.999	0.996	0.491	1.000	0.961
Rotherham 017D	1.000	1.000	0.999	0.978	1.000	0.711	0.988	0.972

Values are scaled ranks

As an example, all values greater than 0.99 are in the top 1% most deprived

IoD 2025 classification

class	Inc	Emp	Hea	Edu	Bar	Cri	Liv
A	0.848	0.801	0.751	0.771	0.827	0.781	0.757
B	0.084	0.090	0.110	0.097	0.270	0.130	0.257
C	0.617	0.631	0.613	0.682	0.530	0.556	0.267
D	0.905	0.925	0.921	0.917	0.459	0.900	0.417
E	0.672	0.718	0.763	0.680	0.200	0.749	0.704
F	0.545	0.513	0.435	0.491	0.792	0.502	0.743
G	0.207	0.195	0.153	0.229	0.875	0.183	0.780
H	0.353	0.370	0.431	0.302	0.176	0.456	0.600
I	0.314	0.311	0.310	0.383	0.562	0.257	0.157

Median scaled ranks by IoD2025 class

Classification using *k*-medians with set of scaled ranks as input

A: High Income, Employment, Barriers, higher others.

B: Low all, moderate Barriers and Living Environment.

C: Moderate all, lower Living Environment.

D: High all, moderate Barriers and Living Environment.

E: Moderate all, low Barriers.

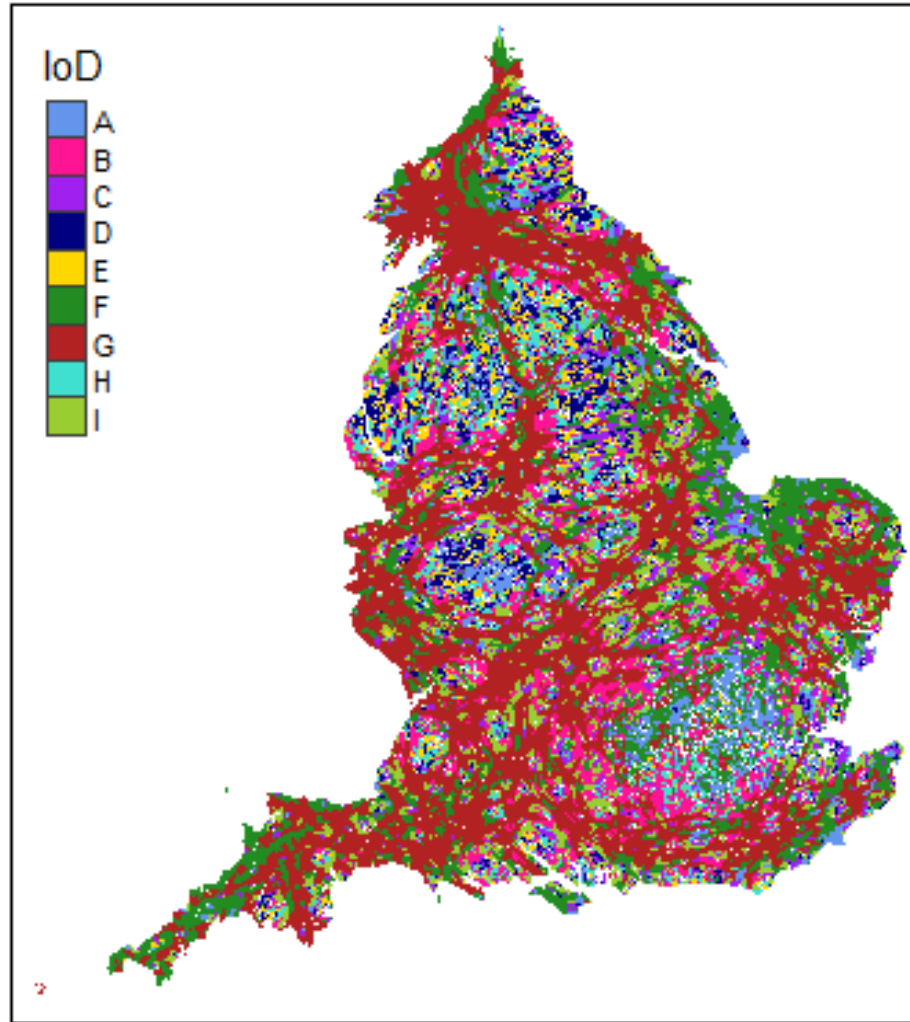
F: Moderate all, higher Barriers and Living Environment.

G: Low to moderate all, high Barriers, higher Living Environment.

H: Moderate all, low Barriers.

I: Moderate all, low Living Environment.

IoD 2025 classification



A: High Income, Employment, Barriers, higher others.

B: Low all, moderate Barriers and Living Environment.

C: Moderate all, lower Living Environment.

D: High all, moderate Barriers and Living Environment.

E: Moderate all, low Barriers.

F: Moderate all, higher Barriers and Living Environment.

G: Low to moderate all, high Barriers, higher Living Environment.

H: Moderate all, low Barriers.

I: Moderate all, low Living Environment.

IoD 2025 classification

	A	B	C	D	E	F	G	H	I
East Midlands	6.43	11.70	12.75	13.59	12.79	7.45	8.61	11.38	15.31
East of England	6.07	14.48	19.74	7.18	4.55	9.82	10.27	8.54	19.35
London	29.20	12.25	3.90	0.56	2.96	29.30	7.91	11.45	2.46
North East	3.39	11.12	9.22	32.76	18.49	3.33	2.32	12.90	6.48
North West	7.69	13.01	5.41	23.76	18.31	3.92	5.34	16.60	5.98
South East	6.30	21.22	15.94	5.56	3.84	8.60	10.54	9.03	18.97
South West	2.88	12.33	14.82	8.13	8.34	10.42	14.53	9.89	18.67
West Midlands	10.49	9.90	12.34	19.42	12.62	4.25	8.00	12.48	10.49
Yorkshire and The Humber	4.65	10.82	8.08	25.63	14.69	4.53	6.86	15.62	9.12

Median scaled ranks by IoD2025 class by region

As an example, 32.76% of LSOAs in the North East are in IoD class D 'High all, moderate Barriers and Living Environment'

IoD 2025 classification: top quintile

class	Inc	Emp	Hea	Edu	Bar	Cri	Liv
A	0.837	0.873	0.900	0.847	0.221	0.917	0.880
B	0.908	0.922	0.906	0.930	0.692	0.880	0.256
C	0.893	0.923	0.929	0.912	0.322	0.877	0.394
D	0.894	0.821	0.744	0.765	0.897	0.769	0.765
E	0.951	0.938	0.913	0.928	0.666	0.935	0.860

Median scaled ranks by IoD2025 class

Includes only LSOAs in top two IoD deciles (most deprived 20%)

	A	B	C	D	E
East Midlands	17.10	29.00	24.54	13.20	16.17
East of England	8.63	47.72	13.45	14.72	15.48
London	0.45	3.14	0.90	91.27	4.26
North East	21.57	14.86	49.20	3.35	11.02
North West	26.74	17.56	27.48	8.58	19.65
South East	6.17	53.19	8.30	15.53	16.81
South West	20.06	38.60	21.88	6.38	13.07
West Midlands	11.59	20.24	26.42	10.61	31.14
Yorkshire and The Humber	22.37	20.18	33.10	2.88	21.47

A: Very high Income, Employment, Health, Education, Moderate Barriers, low Living Environment.

B: Very high Income, Employment, Health, Education, Crime, Moderate Barriers.

C: Moderate Health, Education, Crime, Living Environment.

D: Very high Health, Crime, Low Barriers.

E: Very high Employment, Health, Education, Low Barriers, Living Environment.

Median scaled ranks by IoD2025 class by region

IoD 2004 to 2025

Region	IMD04	IMD07	IMD10	IMD15	IMD19	IMD25
East Midlands	8.01	7.24	7.17	8.43	8.25	8.22
East of England	2.05	2.34	2.87	4.04	3.62	3.86
London	10.27	10.51	8.31	5.57	2.16	4.02
North East	20.51	17.12	16.77	17.18	19.92	21.46
North West	20.95	20.65	20.39	19.88	21.76	20.21
South East	1.40	1.83	2.37	3.05	3.09	3.32
South West	3.02	3.58	3.93	4.75	4.84	3.90
West Midlands	13.77	15.03	16.34	15.86	16.23	16.06
Yorkshire and The Humber	17.38	16.84	17.38	18.18	19.40	18.48

% of LSOAs in most deprived 10% by IMD

As an example, in 2025 21.46% of LSOAs in the North East were in the most deprived 10% nationally.

IoD 2004 to 2025: top 1%

Region	IMD04	IMD07	IMD10	IMD15	IMD19	IMD25
East Midlands	0.53	0.53	0.53	0.88	0.81	0.77
East of England	0.19	0.21	0.27	0.35	0.32	0.43
London	0.06	0.00	0.00	0.00	0.00	0.04
North East	2.02	1.49	1.84	1.90	2.73	3.09
North West	3.99	3.88	3.66	2.87	3.42	2.58
South East	0.27	0.23	0.27	0.52	0.45	0.34
South West	0.32	0.18	0.18	0.35	0.21	0.15
West Midlands	0.42	0.95	0.90	0.73	0.39	0.90
Yorkshire and The Humber	1.46	1.49	1.55	2.09	1.94	2.24

% of LSOAs in most deprived 1% by IMD

As an example, in 2025 3.09% of LSOAs in the North East were in the most deprived 1% nationally.

% of LSOAs in Top IoD decile by LA

LA	IMD04	IMD07	IMD10	IMD15	IMD19	IMD25	Min
Middlesbrough	48.89	45.56	48.89	48.89	50.00	50.00	45.56
Kingston upon Hull	45.24	43.45	42.26	44.64	45.24	41.67	41.67
Manchester	60.34	50.85	44.41	41.36	43.73	40.68	40.68
Knowsley	53.00	48.00	45.00	46.00	47.00	40.00	40.00
Birmingham	38.39	39.61	38.24	40.36	42.03	42.94	38.24
Liverpool	58.28	54.97	49.01	46.03	49.01	36.75	36.75
Hartlepool	36.84	31.58	33.33	31.58	35.09	42.11	31.58
Bradford	30.45	29.49	31.41	32.69	33.97	36.86	29.49
Stoke-on-Trent	31.29	33.74	31.90	30.67	32.52	28.83	28.83
Halton	30.00	27.50	27.50	26.25	32.50	31.25	26.25

% of LSOAs in top IMD decile by region by release year: top 10 by minimum scaled rank

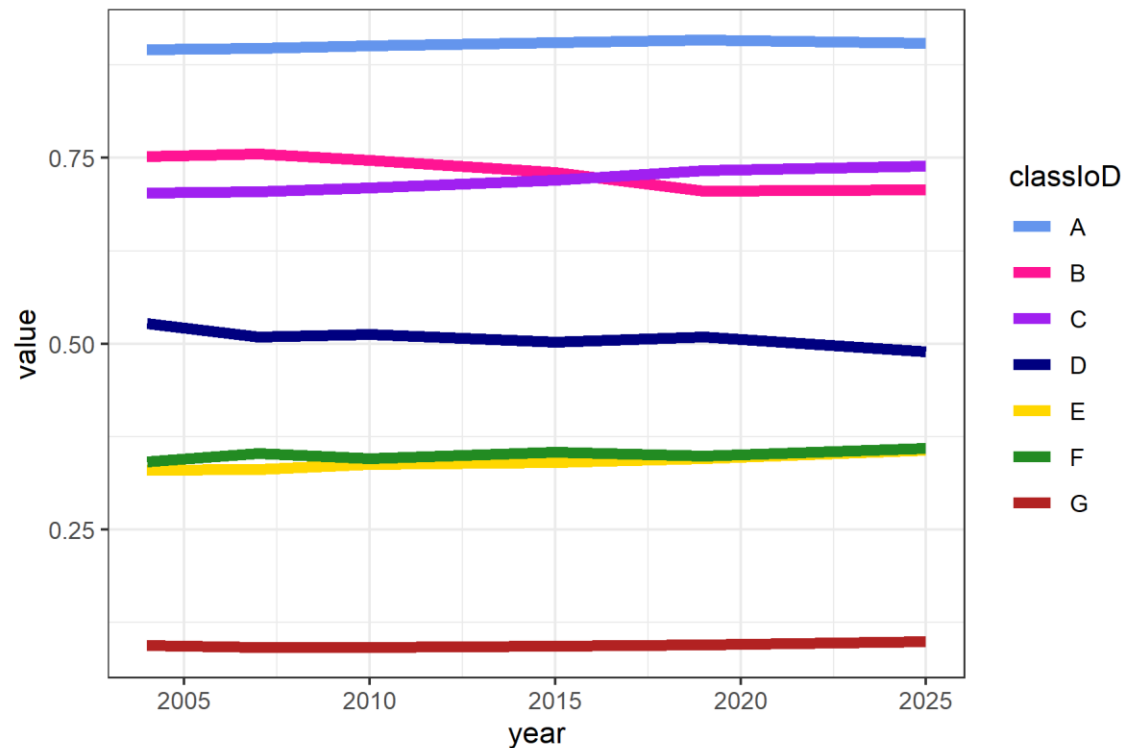
% of LSOAs in Top 1% most deprived by LA

LA	IMD04	IMD07	IMD10	IMD15	IMD19	IMD25	Min
Middlesbrough	10.00	6.67	7.78	11.11	15.56	14.44	6.67
Liverpool	20.86	17.22	13.58	8.94	11.26	5.96	5.96
Wirral	5.74	4.78	4.78	4.31	7.66	7.18	4.31
Blackpool	4.26	12.77	17.02	20.21	23.40	19.15	4.26
Bradford	4.49	5.13	6.41	3.85	3.85	7.69	3.85
St. Helens	3.31	3.31	3.31	3.31	4.96	4.13	3.31
Salford	4.97	6.21	6.21	3.73	3.73	3.11	3.11
Manchester	18.64	11.86	7.12	6.10	5.76	3.05	3.05
Kingston upon Hull	4.76	6.55	5.36	10.71	7.14	2.98	2.98
Mansfield	2.94	2.94	2.94	2.94	4.41	2.94	2.94

% of LSOAs in top IMD 1% by region by release year: top 10 by minimum scaled rank

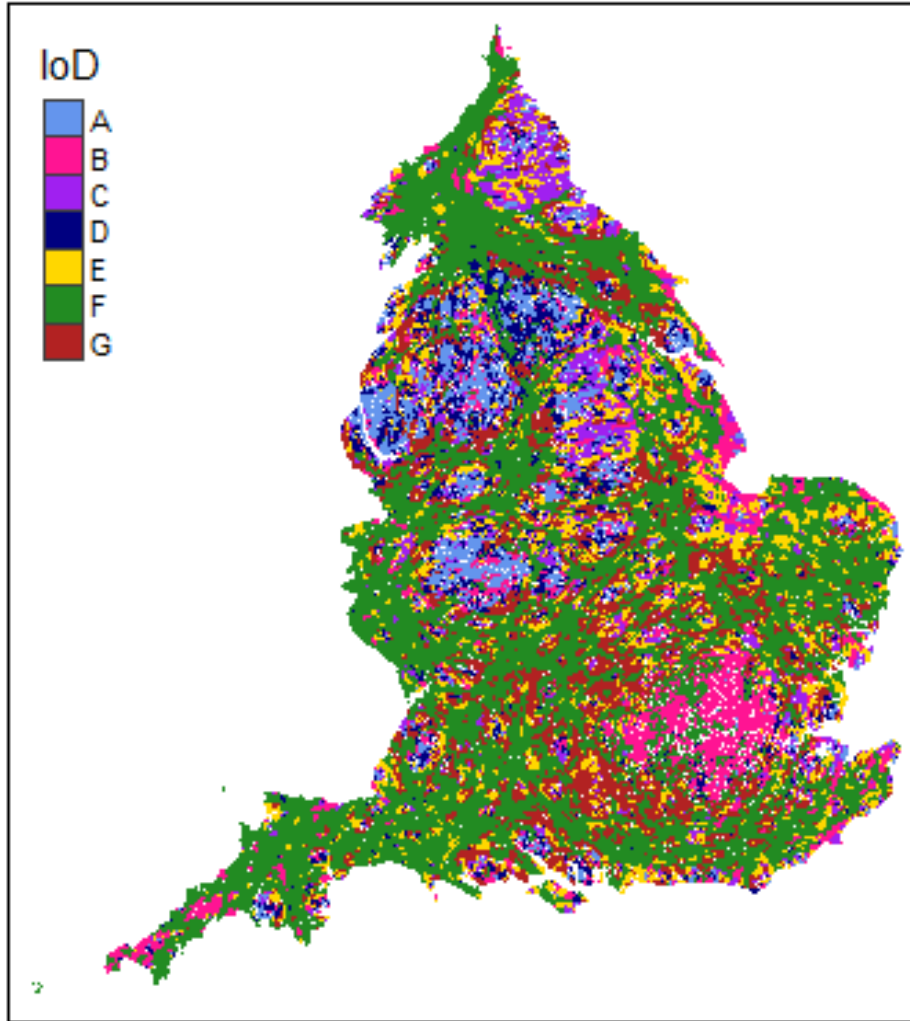
Trajectories of deprivation in England

IMD trajectories using R package kml3d – *k*-medians for longitudinal data
Inputs are scaled ranks for each of the seven domains



- A: Persistently highest deprivation.
- B: Higher deprivation, decreasing.
- C: Higher deprivation, increasing.
- D: Moderate deprivation, decreasing.
- E: Lower deprivation, increasing.
- F: Persistently lower deprivation.
- G: Persistently lowest deprivation.

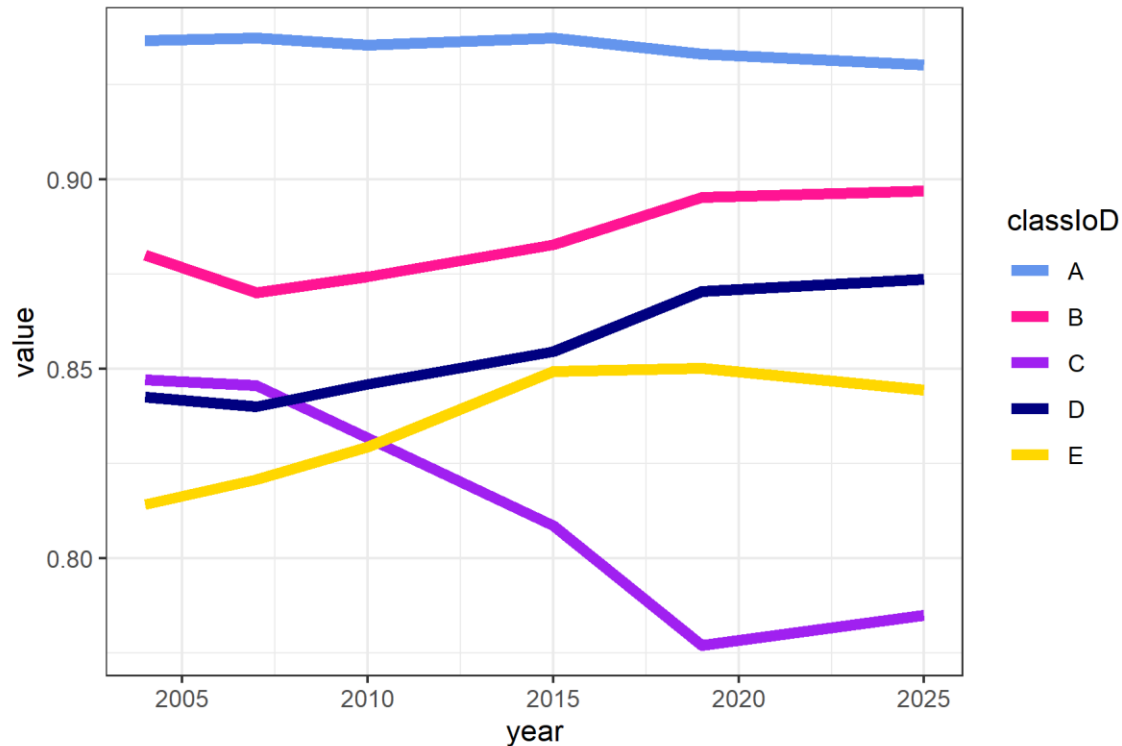
Trajectories classification



- A: Persistently highest deprivation.
- B: Higher deprivation, decreasing.
- C: Higher deprivation, increasing.
- D: Moderately high deprivation, decreasing.
- E: Lower deprivation, increasing.
- F: Persistently lower deprivation.
- G: Persistently lowest deprivation.

Trajectories of deprivation in England: top quintile

IMD trajectories only for LSOAs in top 20% most deprived for at least one IoD release



A: Persistently highest deprivation, decreasing.

B: High deprivation, increasing.

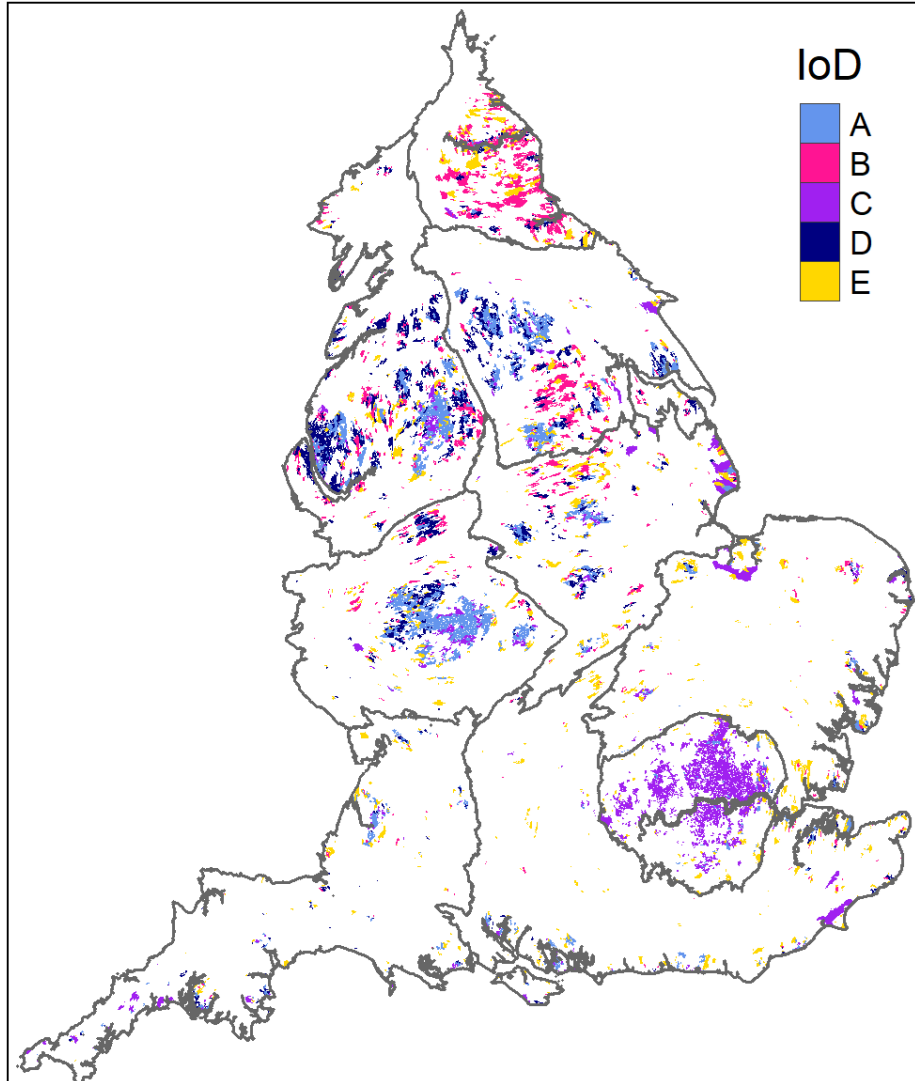
C: Higher deprivation, markedly decreasing.

D: Higher deprivation, increasing.

E: Moderate high deprivation, increasing.

Trajectories of deprivation in England: top quintile

IMD trajectories only for LSOAs in top 20% most deprived for at least one IoD release



- A: Persistently highest deprivation, decreasing.
- B: High deprivation, increasing.
- C: Higher deprivation, markedly decreasing.
- D: Higher deprivation, increasing.
- E: Moderate high deprivation, increasing.

% of LSOAs by region by trajectory class

	A	B	C	D	E
East Midlands	23.65	25.90	5.24	27.54	17.66
East of England	15.43	13.37	9.26	13.17	48.77
London	3.87	0.00	89.01	0.06	7.07
North East	2.03	69.28	1.08	15.29	12.31
North West	21.19	18.74	5.23	47.94	6.90
South East	28.20	7.61	9.52	14.01	40.66
South West	33.84	7.16	12.80	22.78	23.43
West Midlands	47.59	11.56	9.28	19.41	12.15
Yorkshire and The Humber	32.87	22.98	3.79	33.99	6.37

A: Persistently highest deprivation, decreasing.
B: High deprivation, increasing.
C: Higher deprivation, markedly decreasing.
D: Higher deprivation, increasing.
E: Moderate high deprivation, increasing.

% of LSOAs by region by trajectory class

% of LSOAs by OA classification by trajectory class

	A	B	C	D	E
Baseline UK	25.45	14.31	4.01	34.97	21.26
Ethnically Diverse Suburban Professionals	12.04	9.26	11.11	35.19	32.41
Legacy Communities	17.10	26.42	4.66	39.90	11.92
Low-Skilled Migrant and Student Communities	36.41	2.28	32.19	19.12	9.99
Multicultural and Educated Urbanites	12.66	0.16	81.60	4.09	1.49
Retired Professionals	3.28	22.95	22.95	13.11	37.70
Semi- and Un-Skilled Workforce	9.81	48.56	0.73	22.88	18.02
Suburbanites and Peri-Urbanites	8.63	25.10	10.20	39.22	16.86

OA classification supergroup

<https://data.geods.ac.uk/dataset/output-area-classification-2021>

A: Persistently highest deprivation, decreasing.

B: High deprivation, increasing.

C: Higher deprivation, markedly decreasing.

D: Higher deprivation, increasing.

E: Moderate high deprivation, increasing.

Trajectory class by NS-SeC change

Gentrification or successful interventions?

	>= 10	5 to 10	-5 to 5	-5 to -10	<= -10
A	0.56	2.85	95.11	1.37	0.10
B	0.38	1.72	97.77	0.13	0.00
C	8.73	13.54	73.56	3.20	0.97
D	0.15	2.16	96.56	0.93	0.20
E	1.59	4.05	93.65	0.64	0.08

A: Persistently highest deprivation, decreasing.

B: High deprivation, increasing.

C: Higher deprivation, markedly decreasing.

D: Higher deprivation, increasing.

E: Moderate high deprivation, increasing.

Changes in the share of people in National Statistics Socio-economic classification (NS-SeC) classes 1 and 2 (Higher managerial, administrative and professional occupations, and Lower managerial, administrative and professional occupations – these two groups would be expected to correspond to higher incomes compared to the other groups) between 2001 and 2021.

[HTTPS://WWW.ONS.GOV.UK/METHODOLOGY/CLASSIFICATIONSANDSTANDARDS/OTHERCLASSIFICATIONS/THE NATIONAL STATISTICS SOCIOECONOMIC CLASSIFICATION NS SEC BASED ON SOC 2010](https://www.ons.gov.uk/methodology/classificationsandstandards/otherclassifications/thenationalstatisticsocioeconomicclassificationnssecbasedonsoc2010)

Data resources

Project website:

<https://www.qub.ac.uk/research-centres/GIS/Research/Deprivation/>

Just a place holder at present – an email update will follow. The site will include multiple resources including:

- These slides
- Journal article
- Consistent IoDs for 2004, 2007, 2010, 2015, 2019, 2025
- IoD 2025 classifications
- IoD trajectory classifications
- Guidance on using the resources

Soon to be followed by LA profiles and resources from other project strands

LA report

To follow: Report for each LA on deprivation change in the region

- IoD 2025
- Changes 2004-2025

Similar format to existing profiles >



Cambridgeshire and Peterborough Deprivation Trajectories Profile

Christopher D. Lloyd, Gemma Catney, Sara Ferguson (Queen's University Belfast),
David McLennan (deprivation.org) and Paul Norman (University of Leeds)

Last updated: January 21, 2025

underpins the TI and the IoDs.

1. Introduction

This report provides statistical summaries of deprivation and deprivation trajectories in **Cambridgeshire and Peterborough** in the East of England. Trajectories refer to the direction of change in deprivation. For example, one neighbourhood may have seen a consistent increase in deprivation while in another levels may have fluctuated or consistently decreased.

Areas with similar levels of deprivation as measured at the present time may have had very different deprivation histories. One area may have been subject to persistently high deprivation levels over many years while another may have only recently seen an increase in deprivation levels. Considering deprivation trajectories is, therefore, crucial in the design of effective policies and interventions aimed at reducing deprivation.

The report uses data which come from two sources: Census data for the period 1971 to 2021 and the English Indices of Deprivation (IoD) for 2004 to 2019. The report is divided into three main sections. The first uses Census data for the period 1971 to 2021 to compute the Townsend deprivation index (TI), the second makes use of the IoD, the third considers area deprivation trajectories using both measures. The report is intended to provide an overview of deprivation in Cambridgeshire and Peterborough compared to the East of England and the rest of England, and to allow readers to assess how deprivation has changed in the area since 1971.

2. Geographies

The maps and data included in this report provide information on population and housing for areas called Lower Layer Super Output Areas (LSOAs). There are 33,755 LSOAs in England with an average population of 1674 (figures for 2021). The LSOAs which cover Cambridgeshire and Peterborough are shown in Figure 1, superimposed on a map of roads and other features (source: OpenStreetMap; <https://www.openstreetmap.org/>). This map is provided simply for the purpose of demonstrating the detailed geographical granularity of LSOAs. There are 516 LSOAs in Cambridgeshire and Peterborough. It is important to make a distinction in the use of the word 'Census' between 'Census data' that underpins the TI and 'Census geography' (that is, LSOAs) which



Figure 1: LSOA boundaries.

All of the data used in the profile are constructed for LSOAs as used in the 2021 Census. The Census data from 1971, 1981, 1991, 2001 and 2011, upon which the Townsend Indices have been based, and all the IoD releases, were based on different sets of geographical units to 2021 LSOAs. Therefore a GIS overlay procedure was used to convert these earlier datasets to the 2021 LSOAs.

3. Townsend Deprivation Index

The Townsend deprivation index (TI) has been computed using Census data for multiple time points and it is used here to assess very long term (here, 1971 to 2021) deprivation trends. The TI is constructed using four sets of percentages which are each standardised (by calculating z-scores) and then combined with equal weights to form the overall composite index:

1. Unemployed persons (% of employed plus unemployed) (Emp)
2. Non owner-occupied households (% total households) (Hnt)
3. Households without access to a car or van (% total households) (Car)
4. Households with more than one person per room (% total households) (Ovr)



were identified through this process, each showing identifiable patterns across the data.

- A: Persistently highest and worsening deprivation - deprivation is, and persistently has been highest in these LSOAs between 2004 and 2019. These LSOAs became slightly less deprived between 2007 and 2015 before deprivation levels, although remaining low, increased again post 2015 to 2019.
- B: Higher deprivation, markedly declining - These LSOAs were some of the most deprived in 2004, with levels increasing until 2007. Although levels have remained high, these LSOAs have become gradually less deprived since 2007.
- C: Higher deprivation, worsening - These LSOAs are currently, and typically have been, more deprived. Although deprivation levels were high in 2004, they improved slightly between 2004 and 2007. Since 2007, deprivation levels have persistently increased.
- D: Moderately high deprivation, markedly declining - these LSOAs have typically experienced moderately higher levels of deprivation. Deprivation levels increased between 2004 and 2007. However, since 2007, these deprivation levels have markedly and persistently declined. These decreases in deprivation have been even more pronounced since 2015.
- E: Moderately high deprivation, worsening - These LSOAs have been persistently moderately deprived. Deprivation levels fell slightly between 2004 and 2007, but have since gradually increased again, with these increases being more marked post 2016.
- F: Moderate deprivation, persistently worsening - These LSOAs are moderately deprived, and despite levels remaining moderate, deprivation levels have persistently increased since 2004. These increases were most pronounced between 2004 and 2010, and became more gradual between 2010 and 2019.
- G: Moderately low deprivation, persistently declining - these LSOAs have been some of the less deprived areas across the nation since 2004. However, there has been evidence of improvement over time, with deprivation levels persistently falling since 2004. These improvements have been more so pronounced since 2010.
- H: Lower deprivation, gradually worsening - deprivation levels are generally lower in these LSOAs. However, between 2004 and 2007, deprivation levels increased, before stabilizing until 2010. Post 2010, deprivation increased again before stabilizing in 2015. Deprivation levels have remained

relatively low, but stable since 2015.

- I: Persistently lower deprivation - deprivation has been persistently low in these LSOAs between 2004 and 2019. These LSOAs became slightly less deprived between 2007 and 2015 before deprivation levels, although remaining low, increased again post 2015 to 2019.
- J: Persistently lowest deprivation - deprivation is, and persistently has been very low in these LSOAs between 2004 and 2019.

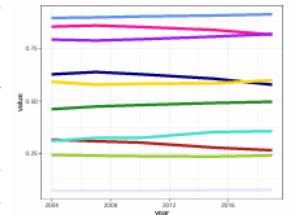


Figure 8: Median IoD ranks by trajectory class

The IoD trajectory classes in **Cambridgeshire and Peterborough** are mapped in Figure 9 showing the trajectory classes in the area. The map uses the same colours per class as in Figure 8.

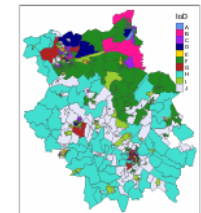


Figure 9: IoD trajectory clusters.

4. Combined analysis

Table 10 shows LSOA membership of both sets of trajectory clusters. This provides a summary of the ways in which LSOAs have changed according to both TI and IoD trajectory clusters. Linking both sets of clusters help to identify, for example, LSOAs which have had high deprivation levels by both measures as



QUEEN'S
UNIVERSITY
BELFAST

Case studies

We are working on set of case studies around deprivation trajectories and policy.

We are very happy to work with you co-developing case studies in other LAs! Key is that the results might be used in helping to shape interventions.

Please get in touch with any suggestions or to discuss ideas:
c.lloyd@qub.ac.uk

Exploring spatial scale using the Employment & Qualifications Index (EQI)

Motivation and objectives

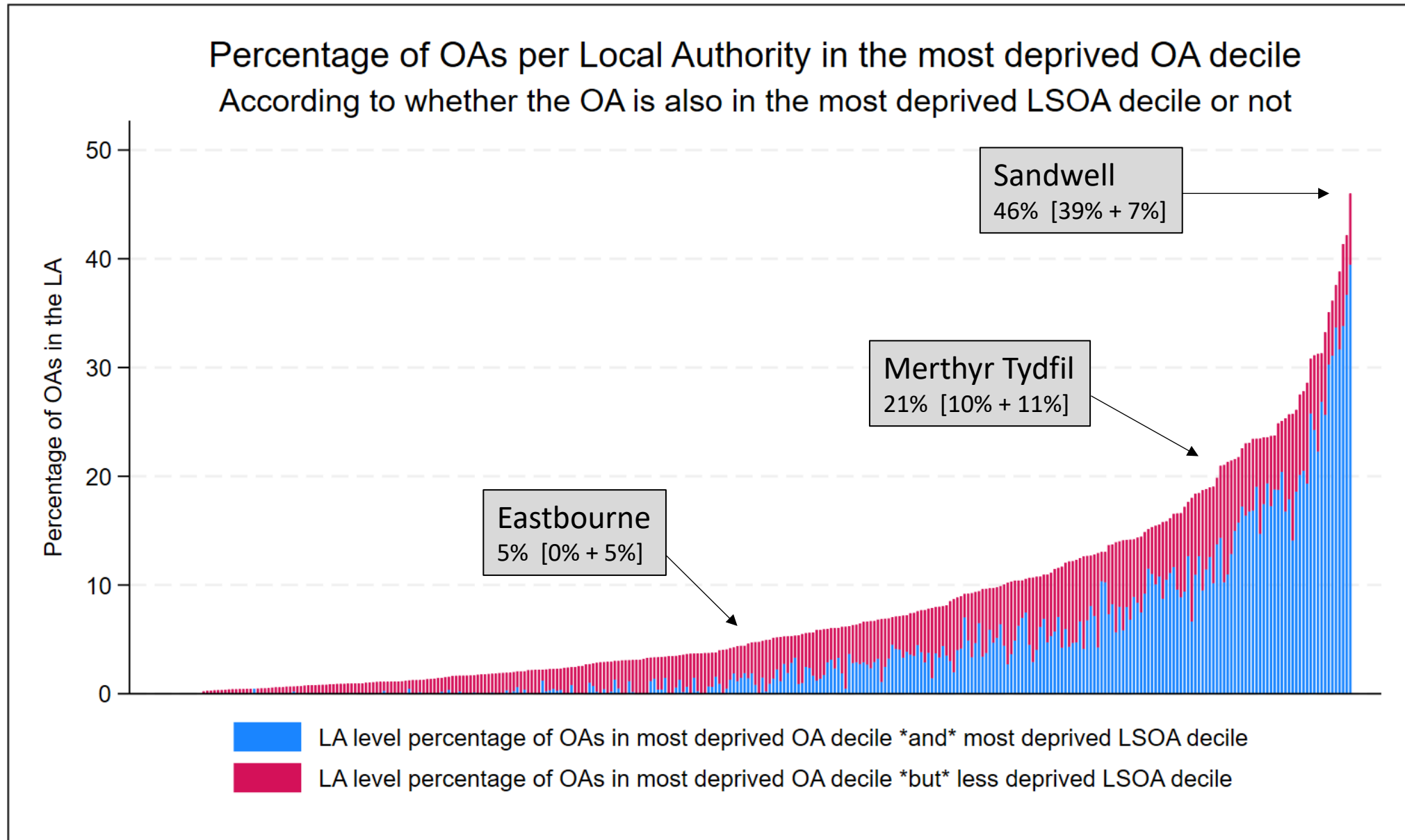
- Strategies, policies and interventions may be targeted at the ‘most deprived’ areas (e.g. using the Index of Multiple Deprivation (IMD)).
- Lower Super Output Areas (LSOAs) often used.
- Implications of shift to Output Areas (OAs) instead?
- Targeting effectiveness and efficiency?



deprivation.org
Research to support the eradication of poverty and deprivation



Exploring spatial scale using the Employment & Qualifications Index (EQI)

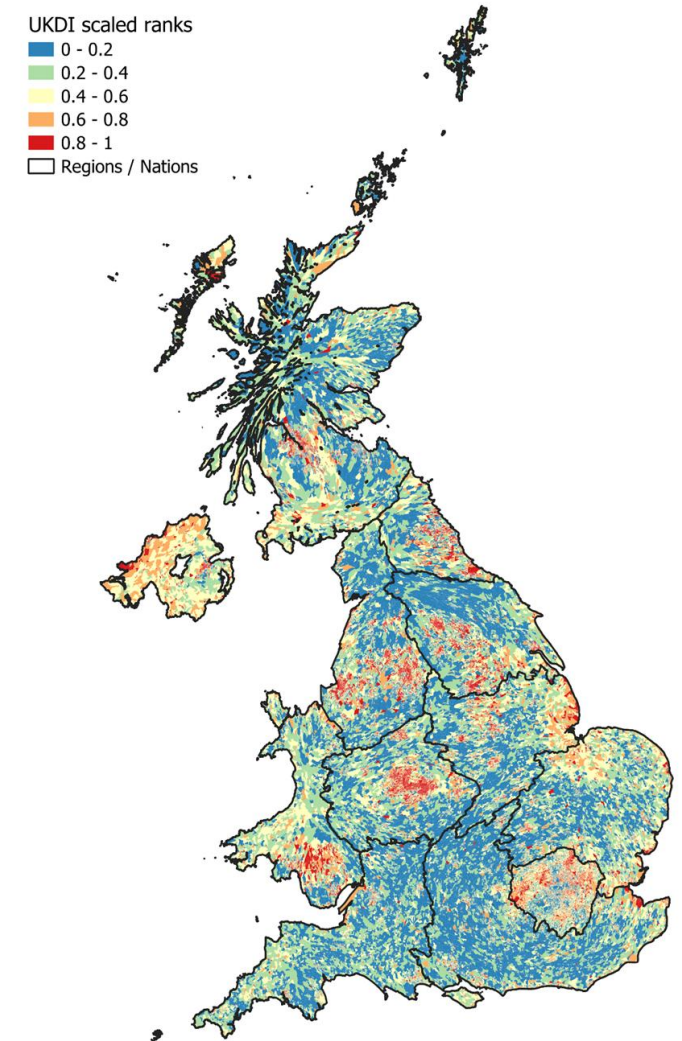


Other deprivation-related resources

Ethnic Group Deprivation Index (EGDI)

<https://rgs-ibg.onlinelibrary.wiley.com/doi/10.1111/geoj.12563>

- Pronounced ethnic inequalities in several neighbourhoods in, for example, Peterborough
- As one case, in **Peterborough 009B** the most deprived group are the Black African group and the least deprived group are the White British and there are 8 deprivation deciles between them



UK deprivation index
(Output area level for England)

Acknowledgements

The Nuffield Foundation are thanked for funding 'Trajectories of Deprivation in the UK' (award ref. WEL /FR-000023253).

The Office for National Statistics are thanked for provision of the data on which the analyses were based. Office for National Statistics, 2021 Census: Digitised Boundary Data (England and Wales) [computer file]. ESRC/JISC Census Programme, Census Geography Data Unit (UKBORDERS), EDINA (University of Edinburgh)/Census Dissemination Unit. Census output is Crown copyright and is reproduced with the permission of the Controller of HMSO.



deprivation.org
Research to support the eradication of poverty and deprivation

