University of Essex

Arts and Humanities Research Council

INNOVATE

Intersectional Network of Integrated Mental Health

Heat Maps on Intersectional Aspects of Mental Health in Essex, England

*The research findings reported in this paper received funding from the **UKRI-AHRC under the Mobilising Community Assets to Tackle Health Inequalities investment**.*

Overview

Data sources

These heat maps were produced using data taken from Understanding Society*:* The UK Household Longitudinal Study (UKHLS) (1) and the 2019 English Indices of Deprivation (2).

Individual-level data

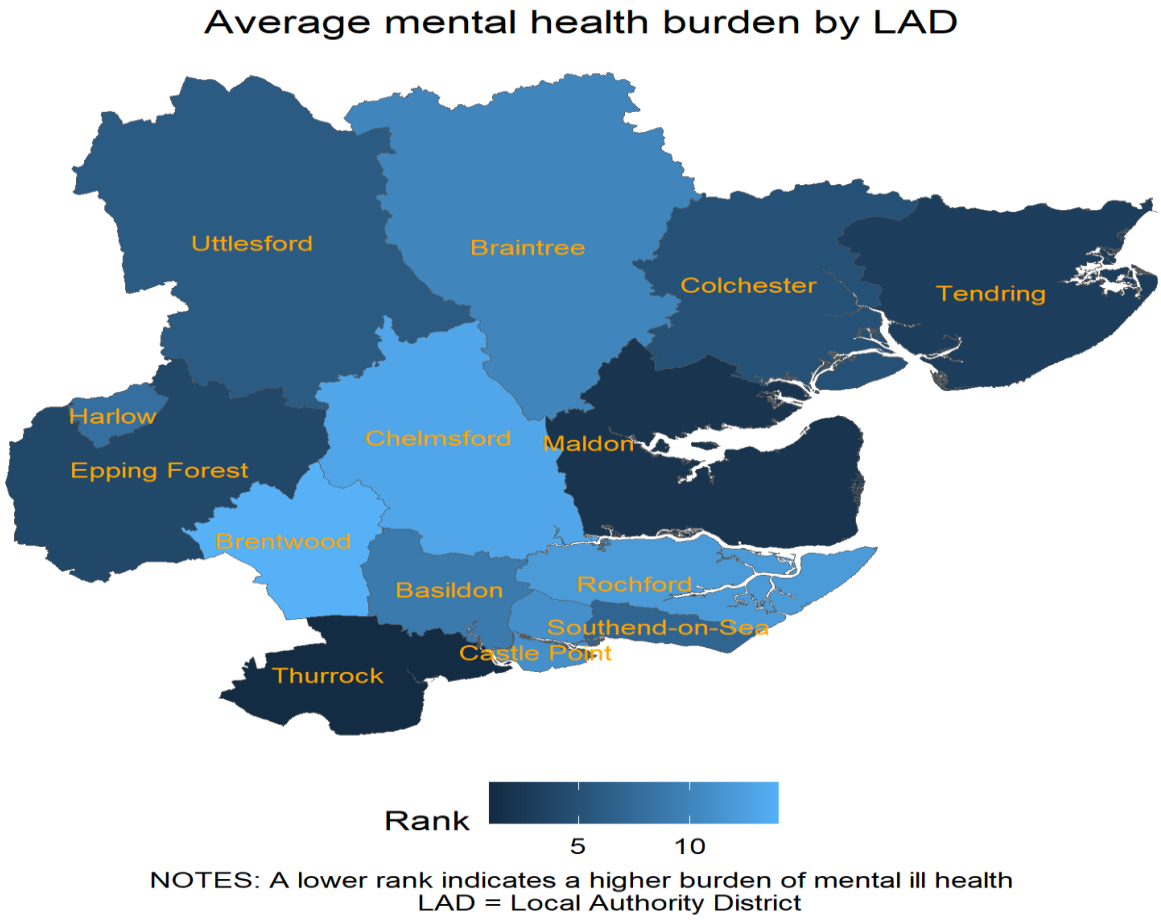
UKHLS is a large, ongoing and nationally representative survey of UK residents. Individual-level data was limited to data collected in the survey between Jan 2017 and May 2021.

Area-level deprivation

Deprivation was measured through seven distinct domains, including: 1) Income, 2) Employment, 3) Education, Skills and Training, 4) Health and Disability, 5) Crime, 6) Barriers to Housing and Services, and 7) the Living Environment which are combined into an overall index of Multiple Deprivation (IMD) (2). Local Authority District (LAD) averages for each domain and total IMD were calculated by averaging the scores of all Lower Super Output Areas (LSOAs) contained within the boundaries of the respective LAD. For this report, the data were limited to the 14 LADs in greater Essex: 1) Basildon, 2) Braintree, 3) Brentwood, 4) Castle Point, 5) Chelmsford, 6) Colchester, 7) Epping Forest, 8) Harlow, 9) Maldon, 10) Rochford, 11) Southend-on-sea, 12) Tendering, 13) Thurrock, and 14) Uttlesford.

Map 1: Mental Health Burden

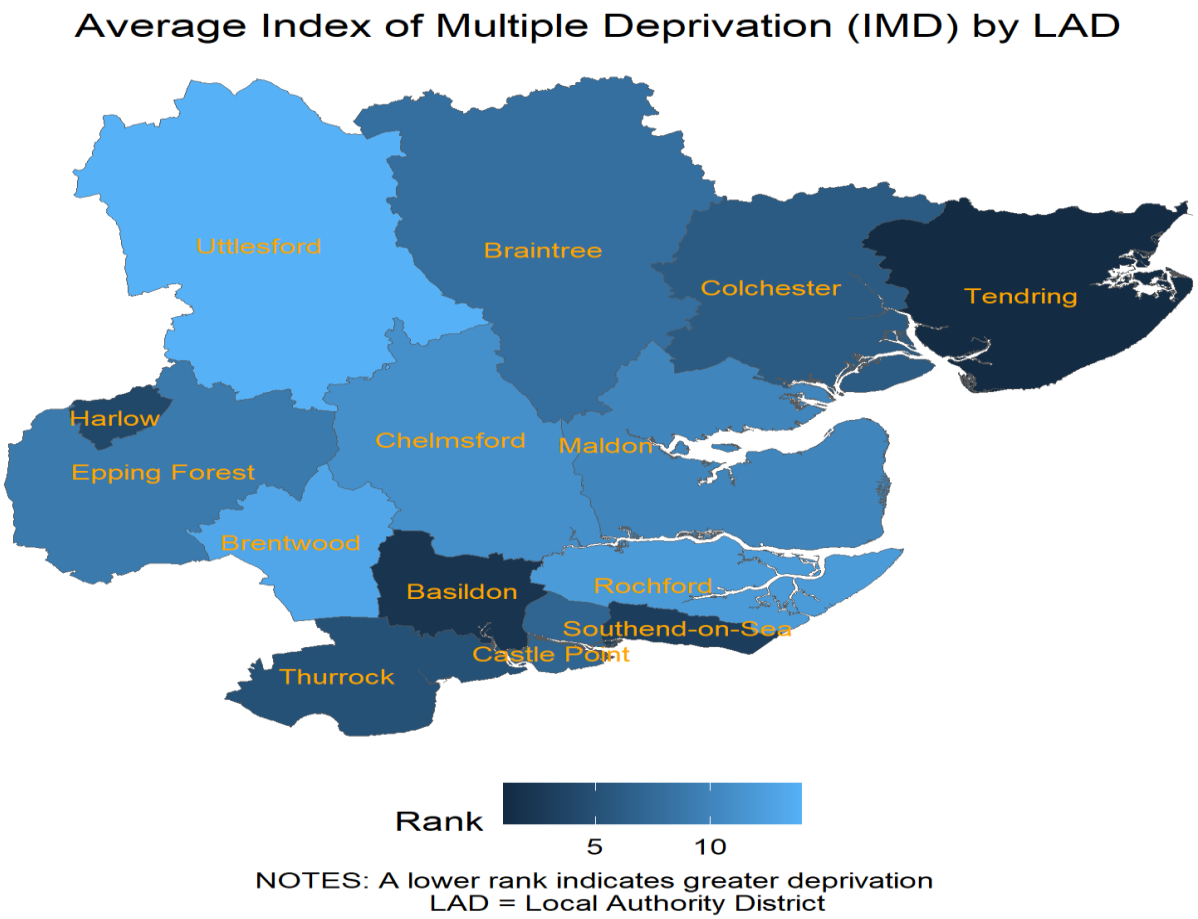
Mental health was measured in the social survey using the MCS-12 questionnaire which assesses mental health functioning. The MCS-12 is effective at distinguishing people with severe mental illness from the general population (3,4) and scores functioning on a scale from 0 (Low functioning) to 100 (High functioning). Regions were then ranked based on their average scores, with residents of Thurrock reporting the lowest mental health functioning scores



NOTES: A lower rank indicates a higher burden of mental ill health
LAD = Local Authority District

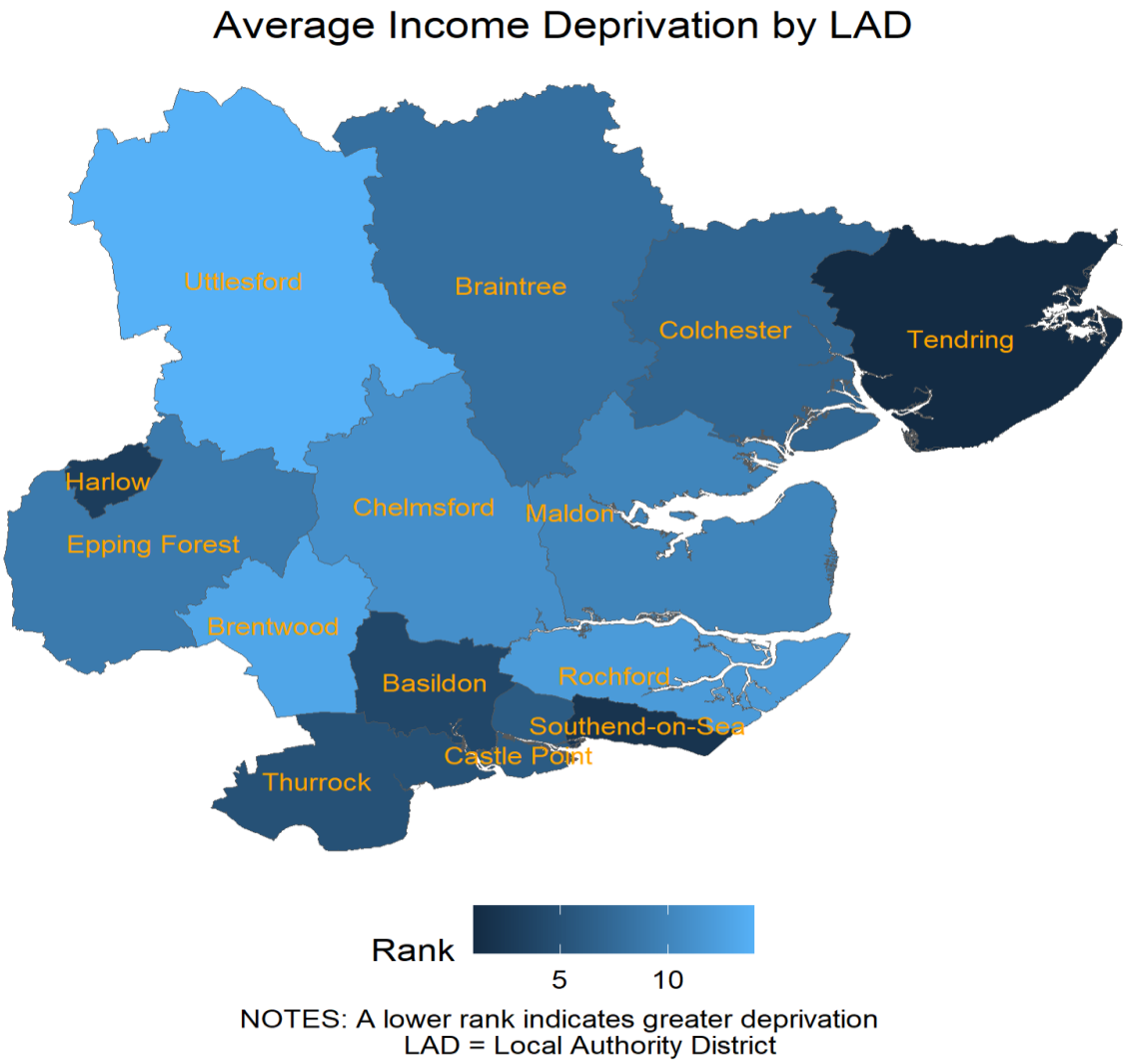
Map 2: Total Deprivation

Total area deprivation was measured using the 2019 IMD scores. Tendering demonstrated the highest overall levels of deprivation, followed by Basildon. Uttlesford and Brentwood were among the least deprived regions in Essex. For more information regarding the indicators used to calculate deprivation, please refer to the "Deprivation Indicators" section below.



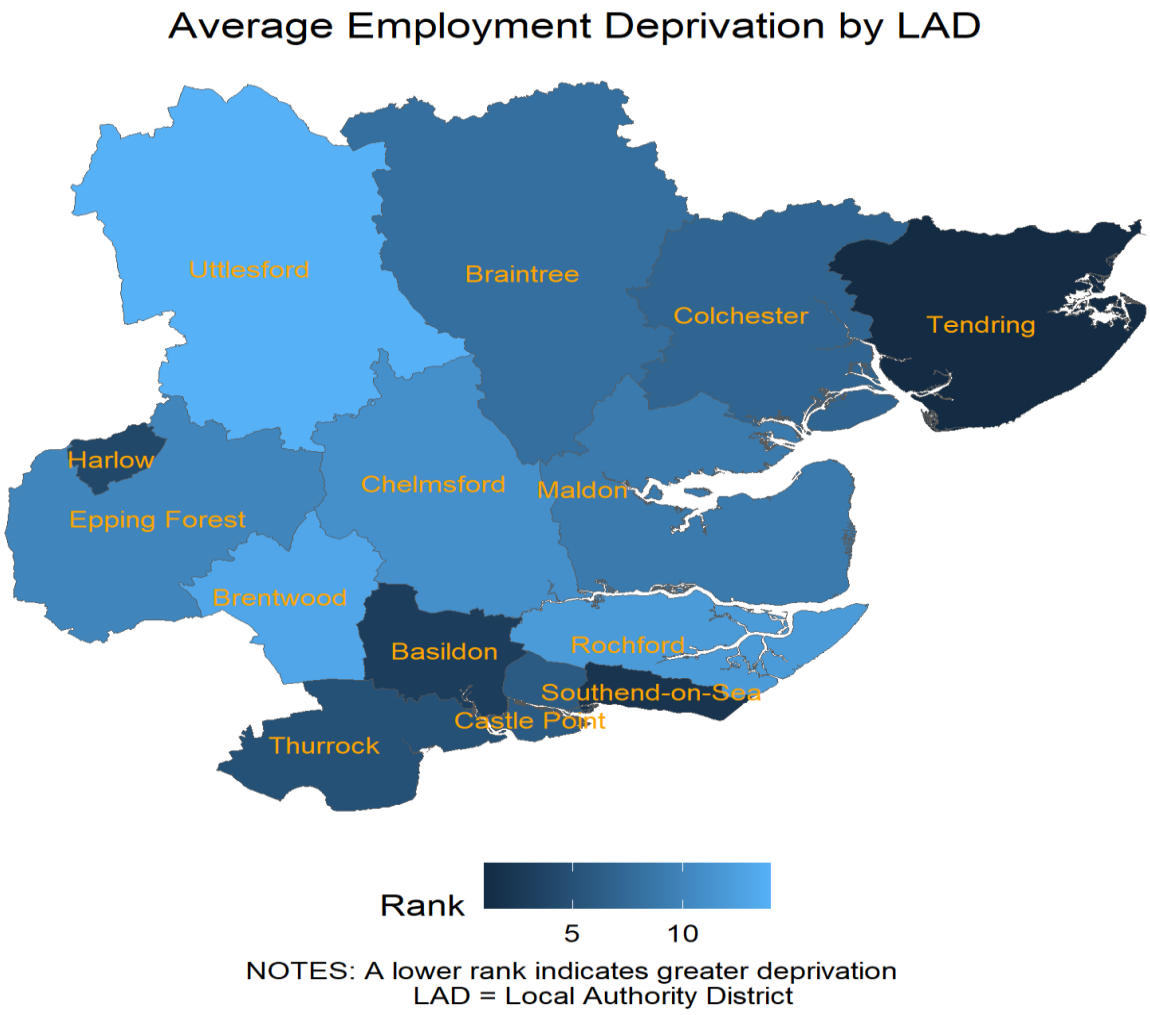
Map 3: Income Deprivation

Tendering and Southend-on-Sea were found to have the highest levels of income deprivation. Uttlesford and Brentwood were the least income-deprived regions in Essex. For more information regarding the indicators used to calculate deprivation, please refer to the "Deprivation Indicators" section below.



Map 4: Employment deprivation

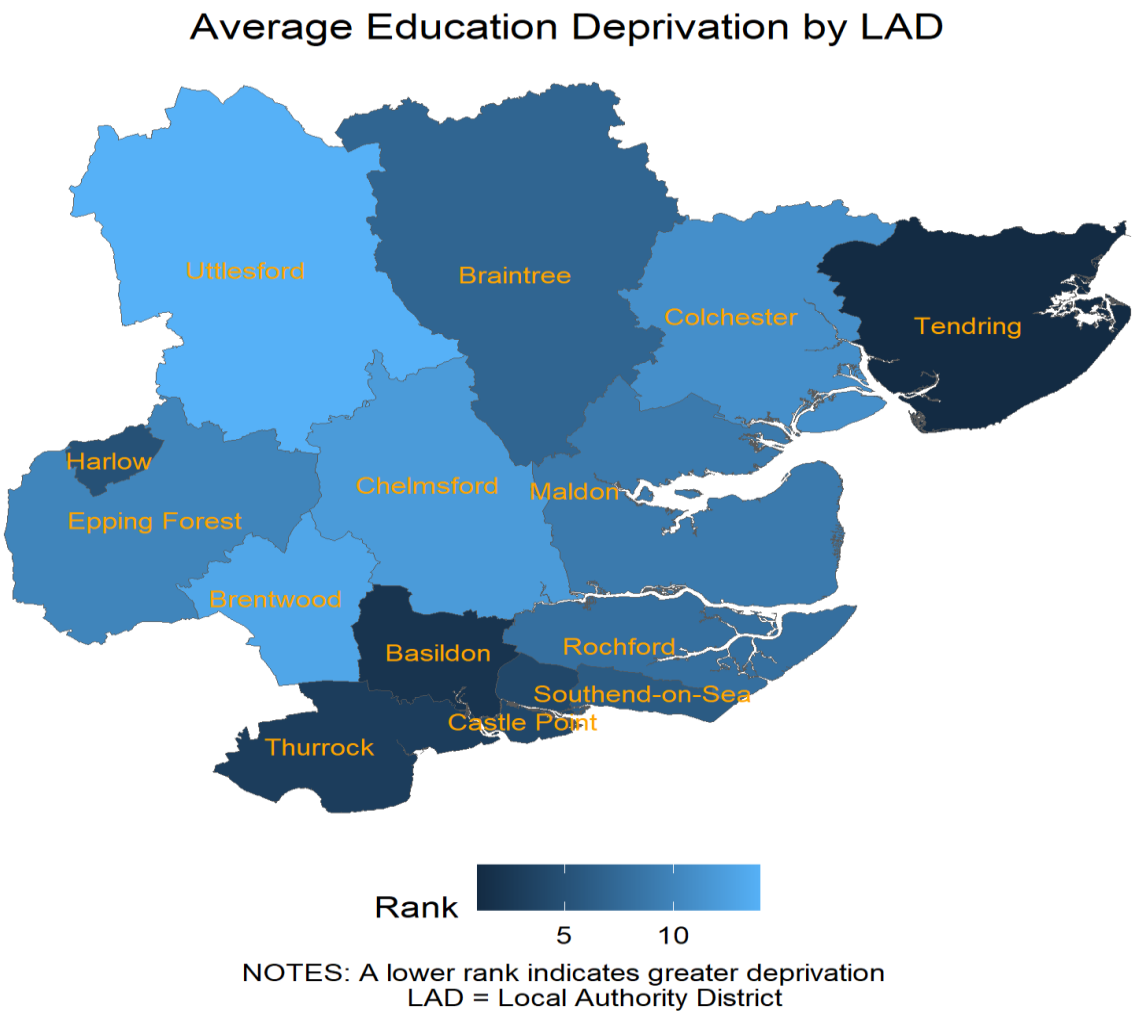
Similar to Income Deprivation, Tendering has the highest levels of employment deprivation, followed by Southend-on-Sea. Equally, Uttlesford and Brentwood reported the lowest levels of employment deprivation in Essex. For more information regarding the indicators used to calculate deprivation, please refer to the "Deprivation Indicators" section below.



NOTES: A lower rank indicates greater deprivation
LAD = Local Authority District

Map 5: Education Skills and Training Deprivation

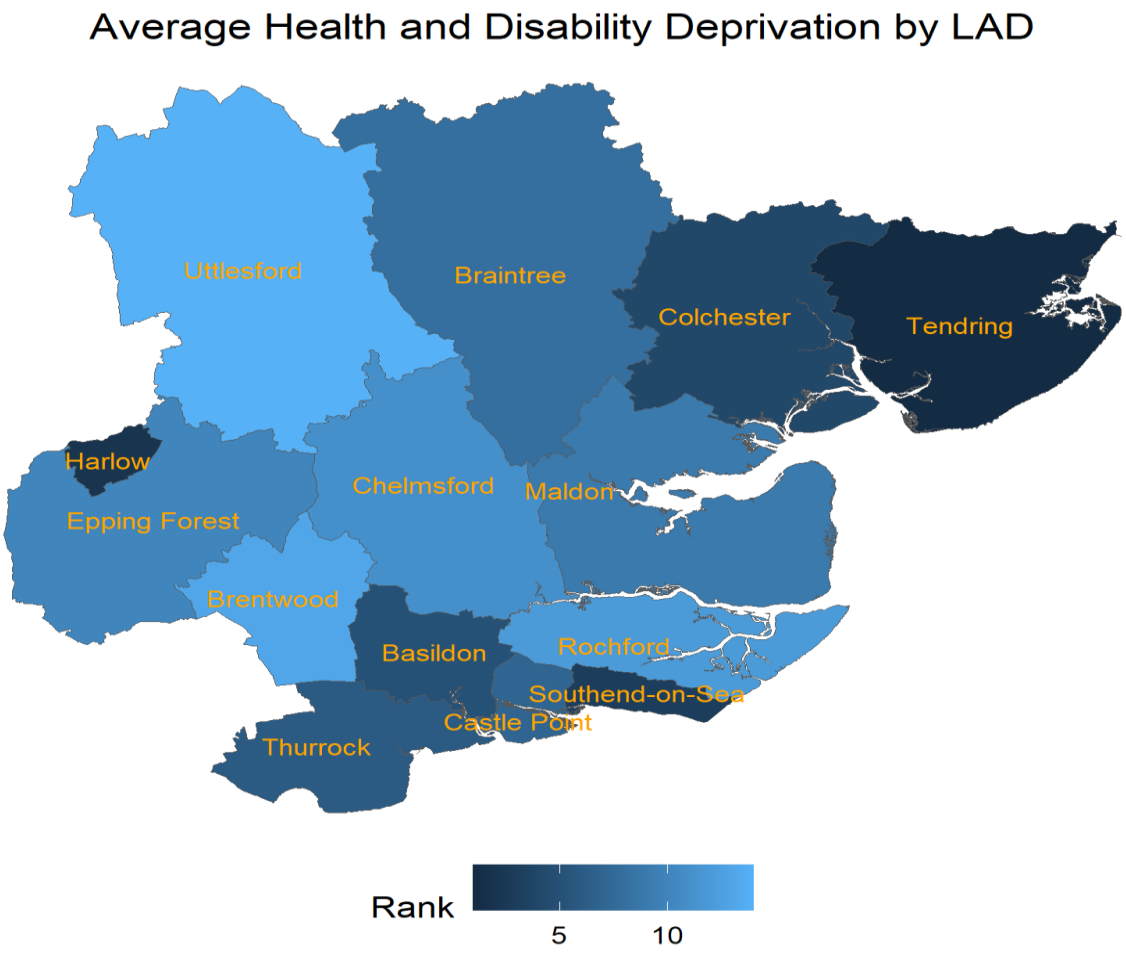
Tendering, followed by Basildon had the highest levels of education, skills and training deprivation. Again Brentwood and Uttlesford showed the lowest level of deprivation. For more information regarding the indicators used to calculate deprivation, please refer to the "Deprivation Indicators" section below.



NOTES: A lower rank indicates greater deprivation
LAD = Local Authority District

Map 6: Health and Disability Deprivation

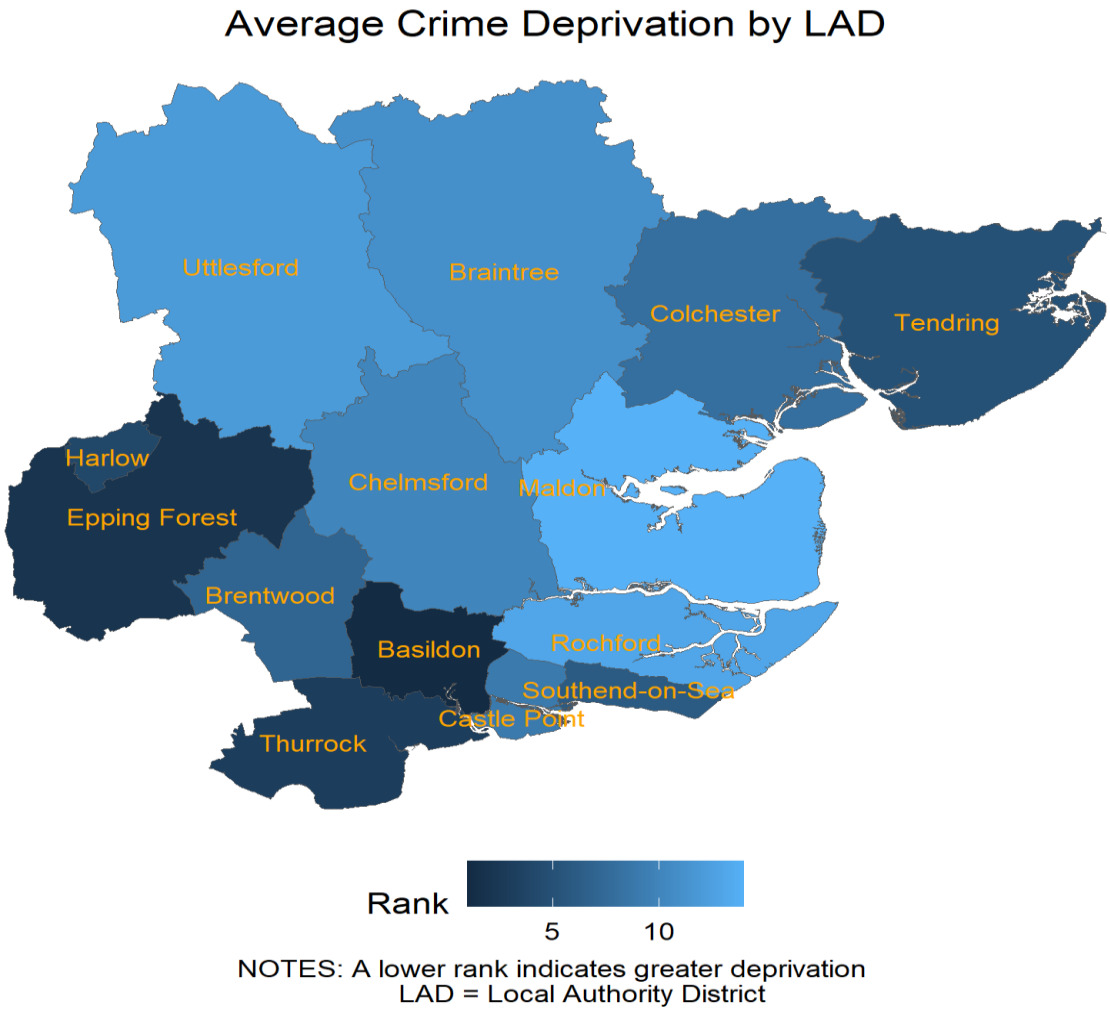
Tendering and Harlow showed the highest levels of health and disability deprivation and again Brentwood and Uttlesford showed the lowest level of deprivation in Essex. For more information regarding the indicators used to calculate deprivation, please refer to the "Deprivation Indicators" section below.



NOTES: A lower rank indicates greater deprivation
LAD = Local Authority District

Map 7: Crime deprivation

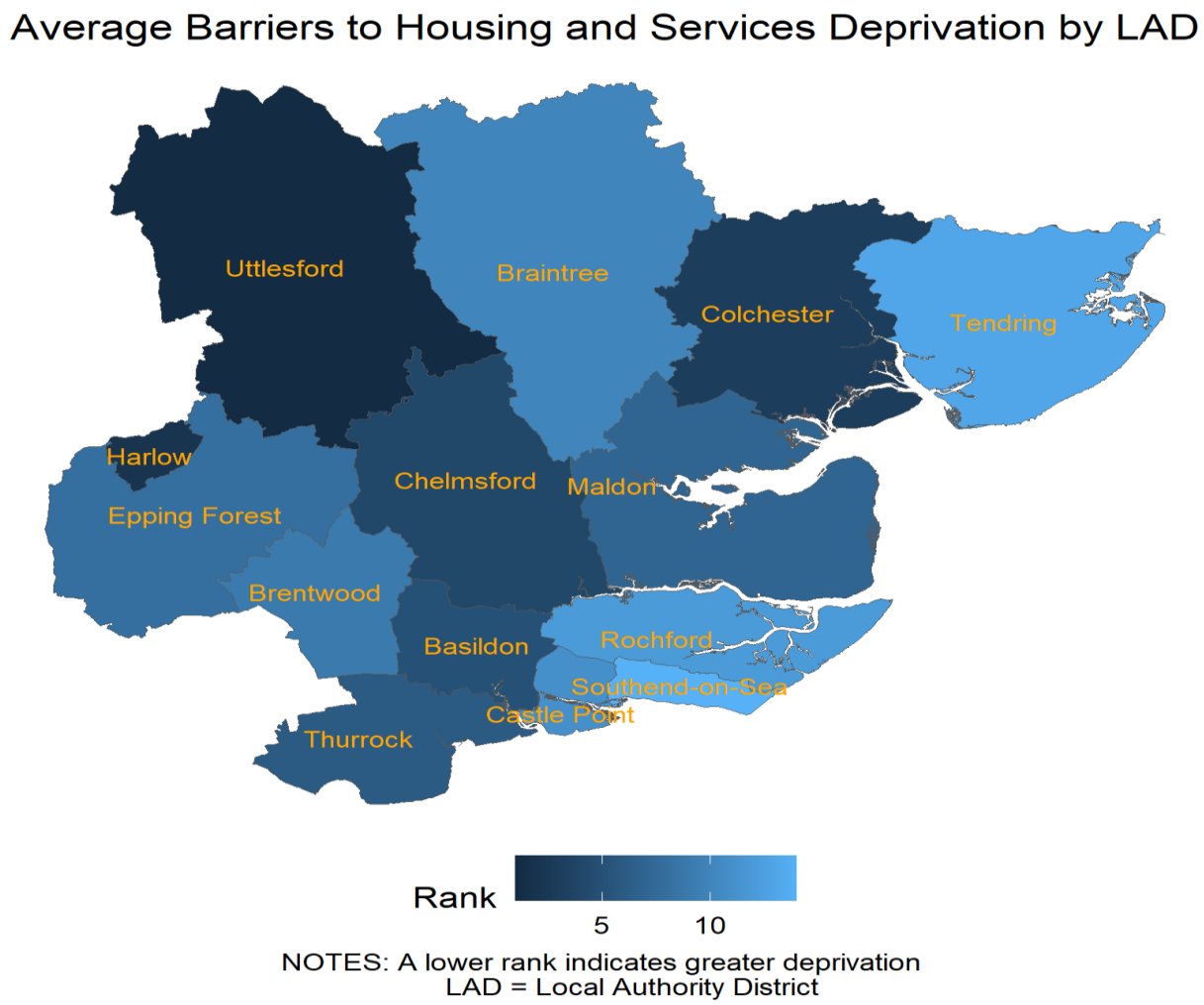
Basildon and Epping Forest reported the highest levels of crime deprivation as measured by rates of Violence, burglary, theft, and criminal damage. Maldon and Rochford reported having the lowest rates of recorded crime in Essex.



NOTES: A lower rank indicates greater deprivation
LAD = Local Authority District

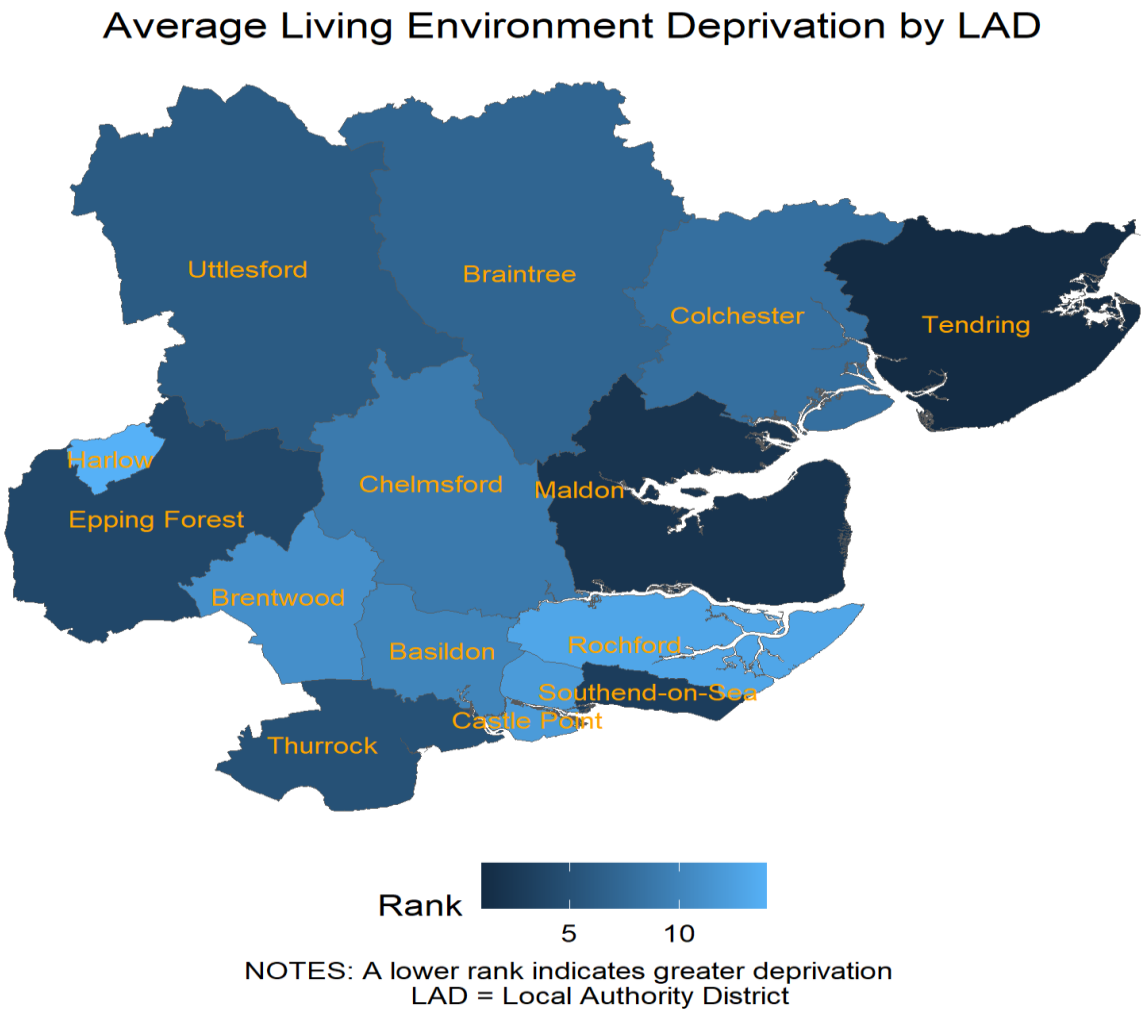
Map 8: Barriers to Housing and Services Deprivation

Barriers to housing and services deprivation is measured by the road distance to the closest GP, post office, general store or supermarket and primary school, as well as the extent of household overcrowding, homelessness and unaffordability. Uttlesford and Harlow demonstrated the highest levels of barriers to services and housing in Essex. Southend-on-Sea and Tendering showed the lowest levels of barriers to housing and services deprivation.



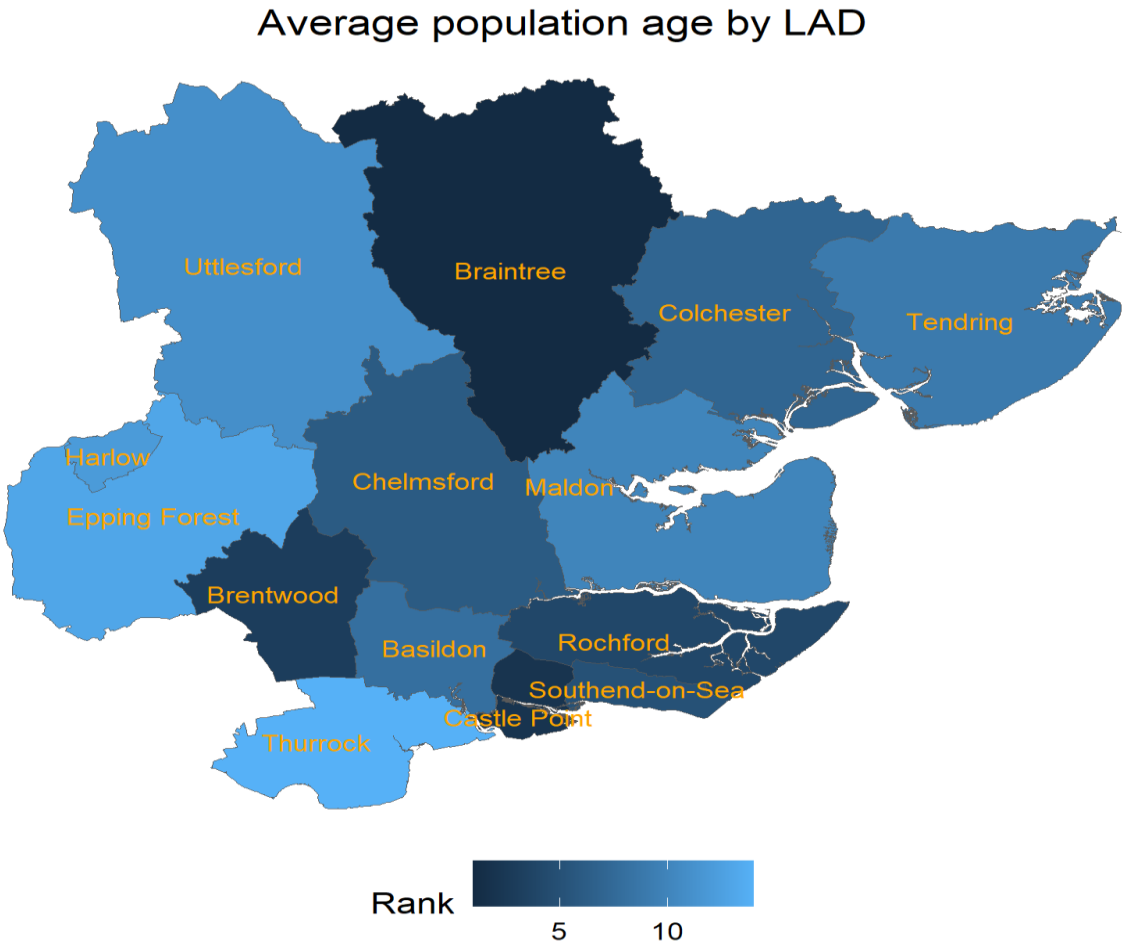
Map 9: Living Environment Deprivation

Deprivation in this sub-category is measured through the area air quality and frequency of traffic accidents as well as the number of houses in poor condition and without central heating. Consistent with reports of poor quality living conditions in tendering (5), Tendering was found to have the worst living environment deprivation, followed by Maldon. The data suggest that Harlow and Rochford are the least deprived regions in Essex within this deprivation domain.



Map 10: Age of population

The average age of each LAD was calculated by averaging the age of residents residing in LSOAs within the boundaries of each LAD. Survey weighting to make the sample nationally representative was applied at the LSOA level (i.e. before the average for each LAD was calculated). The data suggests that Braintree and Castle Point are regions with some of the highest average age of residents in Essex. Conversely, Thurrock and Epping Forest were found to have the lowest average age of residents in Greater Essex. This is consistent with the most recent Census data (6).

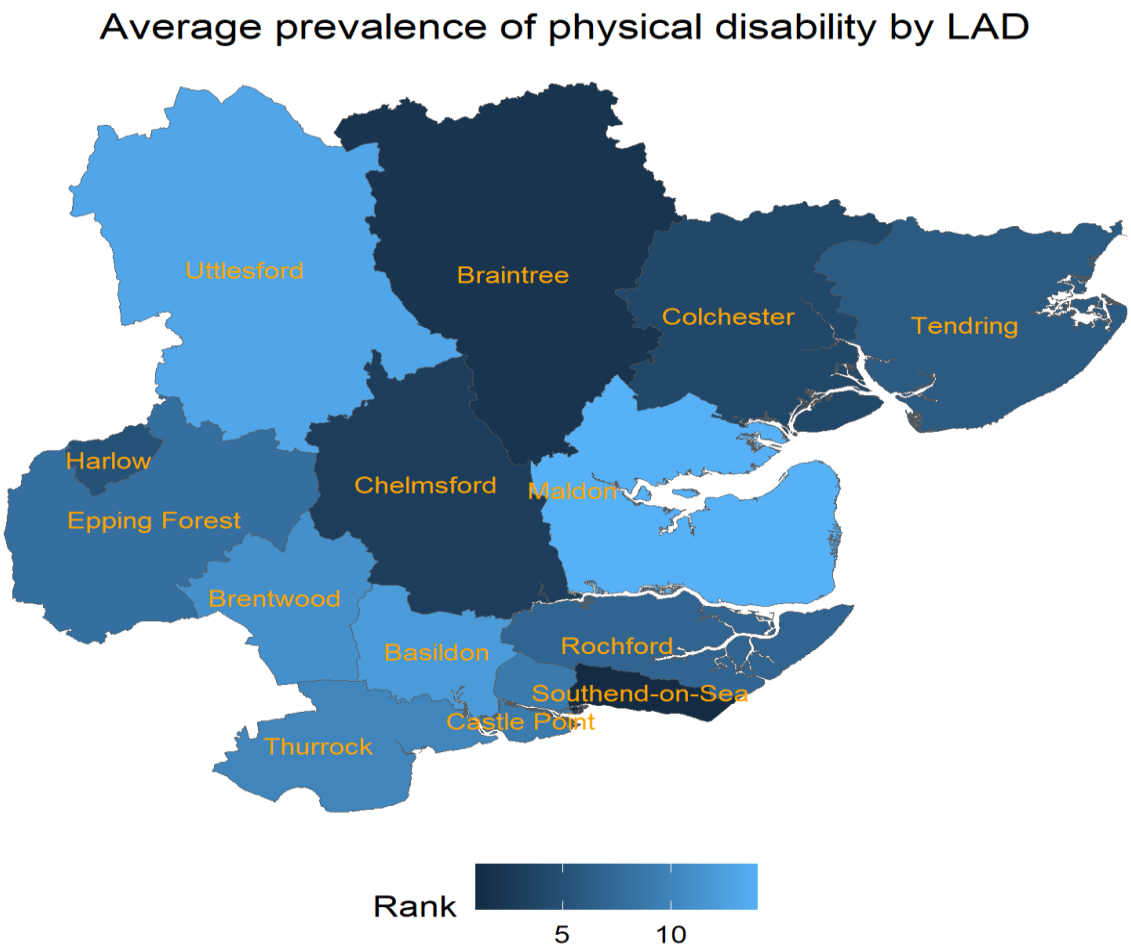


NOTES: A lower rank indicates a higher average population age
LAD = Local Authority District

Map 11: Physical Disability

The prevalence of physical disability was calculated by summing the number of respondents with a physical disability in the LSOAs within each LAD. Again weighting was applied before each LSOA count was summed. Physical disability was defined as having difficulties walking or moving, carrying or lifting, manual dexterity or physical coordination or being diagnosed as blind or deaf to an extent that can not be counteracted with glasses or a hearing aid.

The data suggests that Southend-on-Sea and Braintree had the highest proportion of physically disabled residents and Maldon and Uttlesford had the fewest disabled residents.

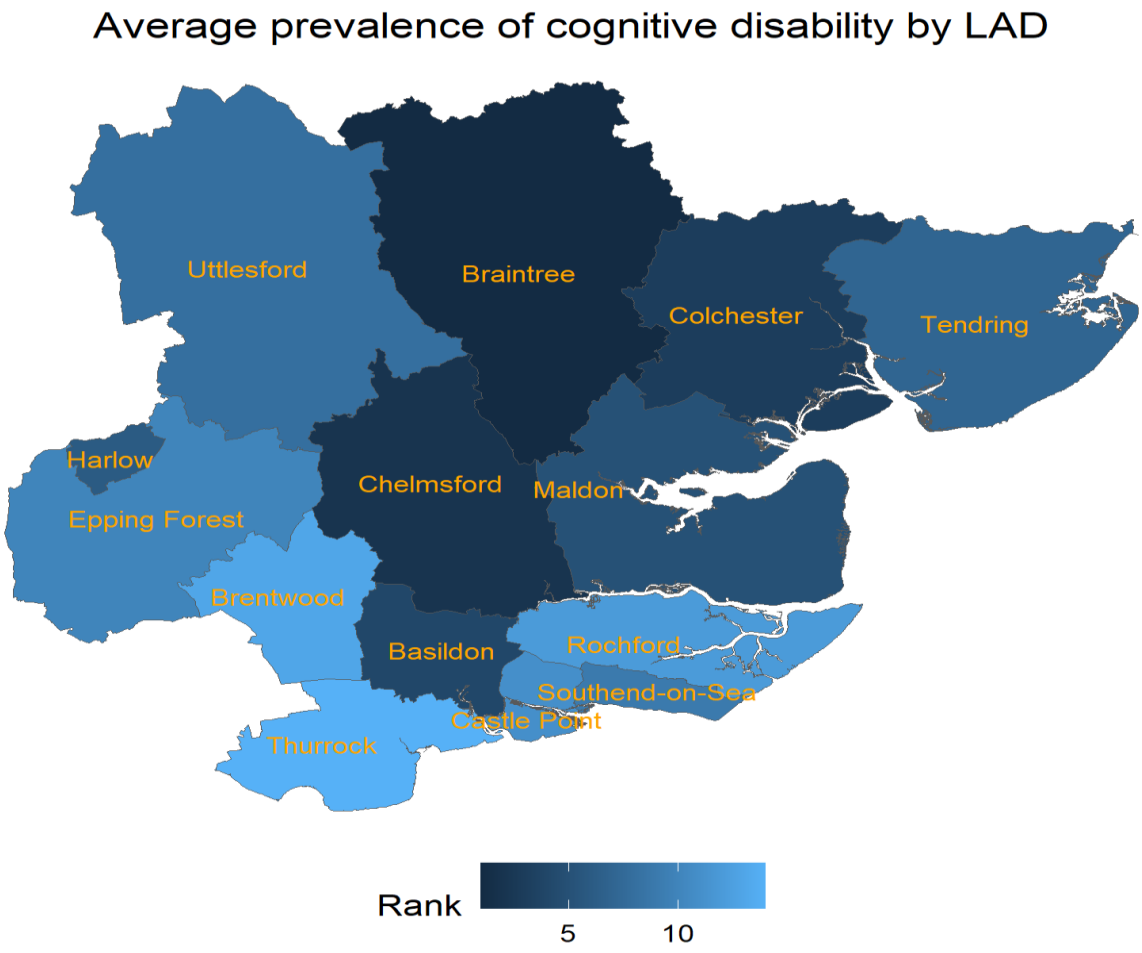


NOTES: A lower rank indicates a higher prevalence of physical disability
LAD = Local Authority District

Map 12: Cognitive disability

Cognitive disability rates were calculated identically to physical disability whereby weighted LSOA rates were summed to generate an LAD sum that is indicative of the prevalence of cognitive disabilities in each LAD. Cognitive disabilities included impairments in communication, memory, concentration and the ability to perceive or be aware of danger.

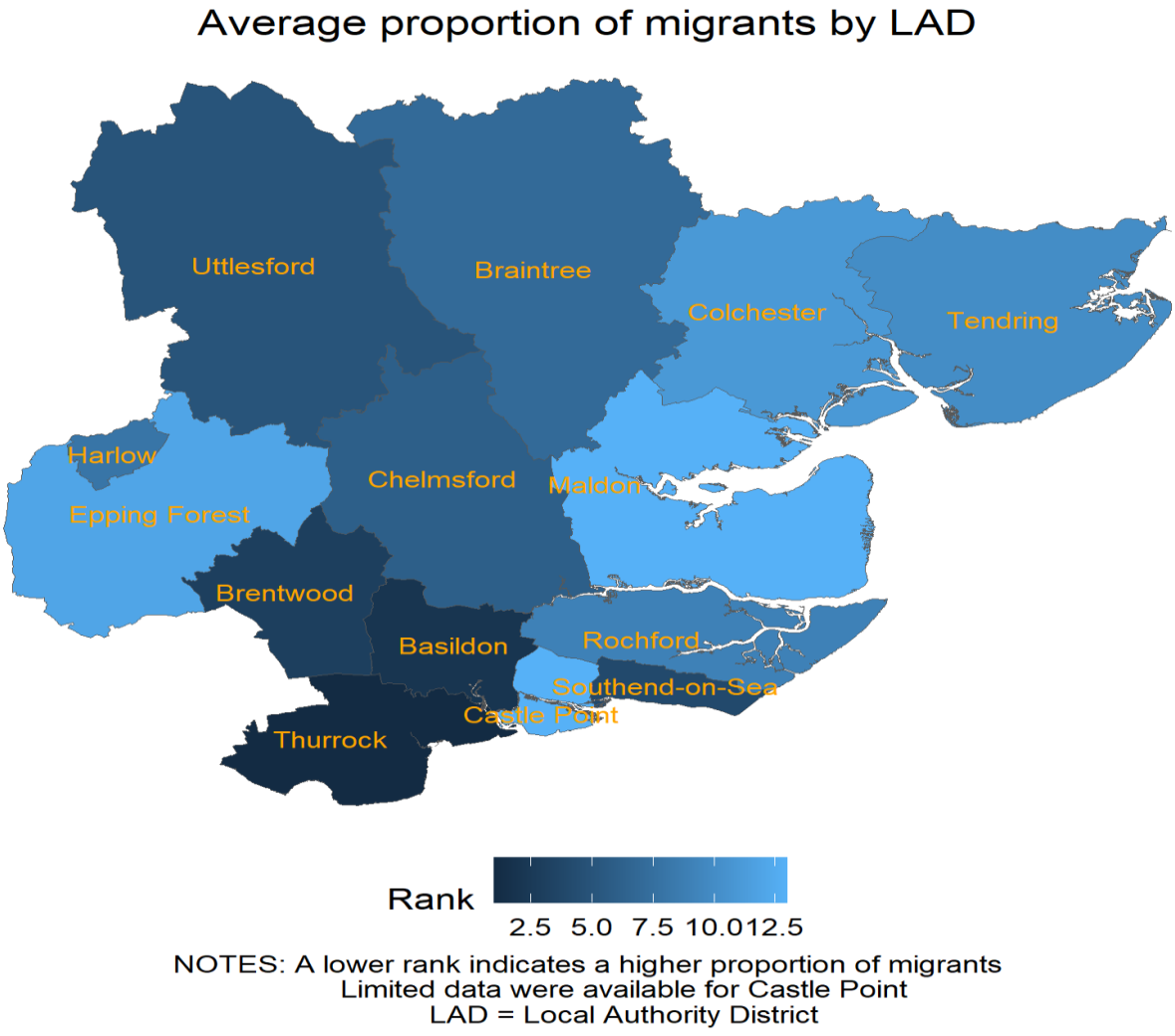
The data used here suggests that Braintree has the highest rates of cognitive disability in Greater Essex and Thurrock has the lowest.



NOTES: A lower rank indicates a higher prevalence of cognitive disability
LAD = Local Authority District

Map 13: Migrant populations

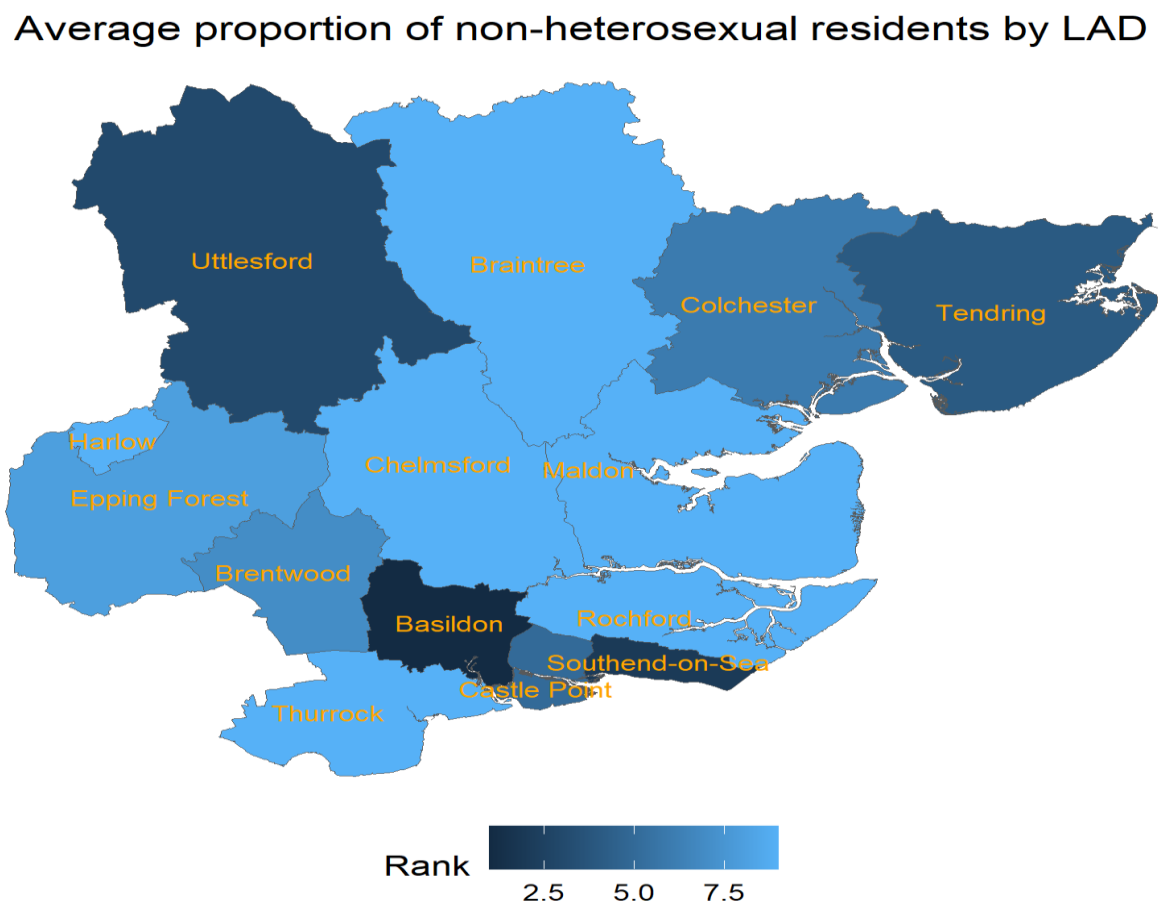
In this data, migrants were defined as anyone born outside of the UK and entered the UK on or after 2004. This cut-off was defined because research suggests that migrants, refugees and asylum seekers in England who have been in the country for less than 15 years tend to experience more stressors and have different habits when reporting ill health than their longer-residing counterparts (7). The proportion of migrants was again calculated by summing the weighted LSOA counts for each LAD. We found that Thurrock and Basildon had the highest proportion of migrants in Essex, whereas Maldon and Castle Point were found to have the lowest proportion of migrants. However, the data for Castle Point was limited. Thus, the representativeness of the data for this parameter (migrants) may contain biases and should be interpreted with caution.



Map 14: Minority Sexual Orientation

In this report, all Non-heterosexual orientations were classified as minority orientations. The same approach as for the other proportional characteristics was used to generate estimates of the proportion of the population that has minority sexual orientations (i.e., weighted sums of LSOAs). However, the sample size for this characteristic was exceedingly small with over 90% of respondents indicating that they "prefer not to say". Furthermore, those who reported having a minority sexual orientation were typically younger and had more qualifications and/or came from higher socioeconomic positions (SEP). As a consequence, the data surrounding this parameter are especially limited. The weighted sums for Thurrock, Harlow, Braintree, Rochford and Chelmsford were all 0. It is more likely that these zero sums are because of data limitations than that the proportion of non-heterosexual residents is very low in these regions. More needs to be done to understand how minority sexual orientation could intersect with other factors to generate increased social disadvantage.

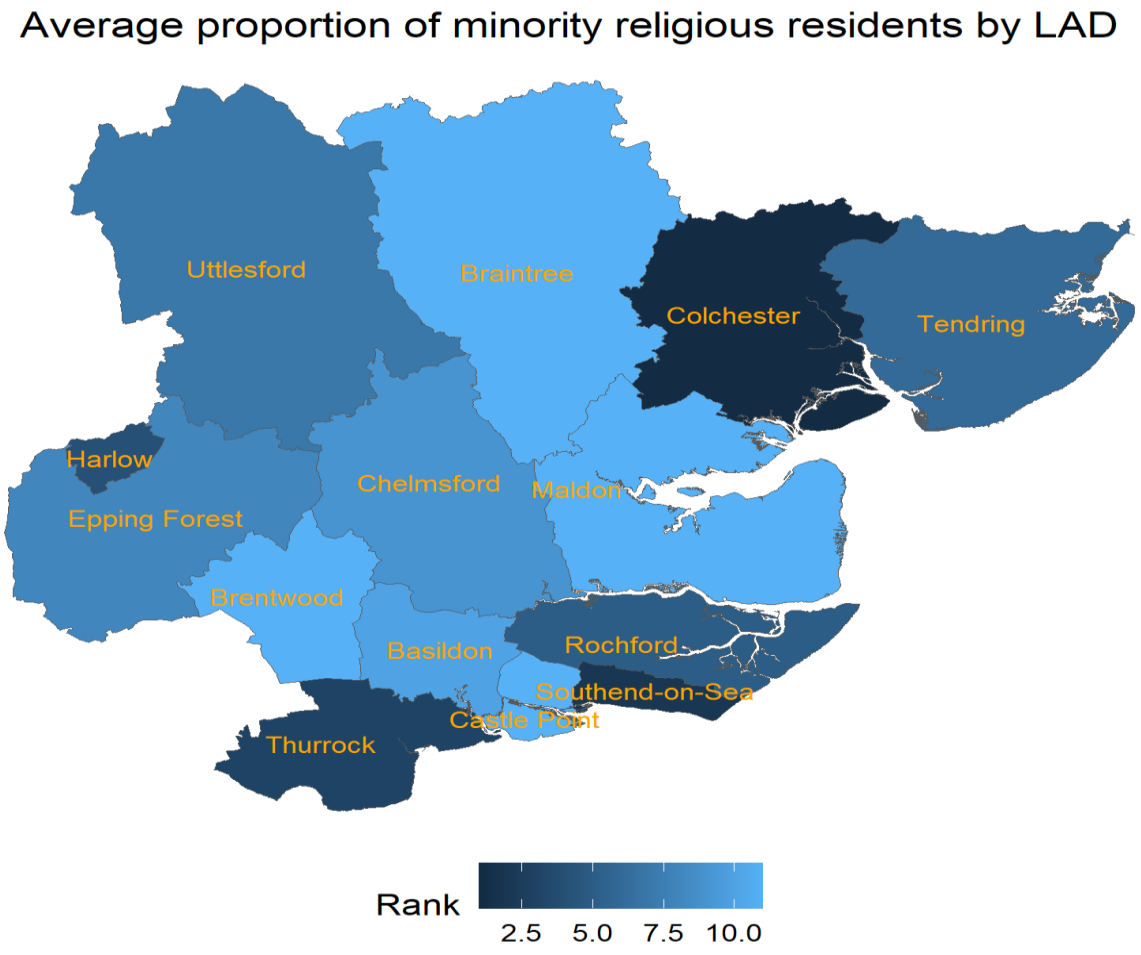
Based on the available, but highly limited data, we found that Basildon and Southend-on-Sea have the highest proportions of non-heterosexual residents and Epping Forest and Brentwood had the lowest proportions (bar the regions with limited data).



NOTES: A lower rank indicates a higher proportion of non-heterosexual residents
Limited data were available for Chelmsford, Rochford, Braintree, Harlow, and Thurrock
LAD = Local Authority District

Map 15: Minority Religious Backgrounds

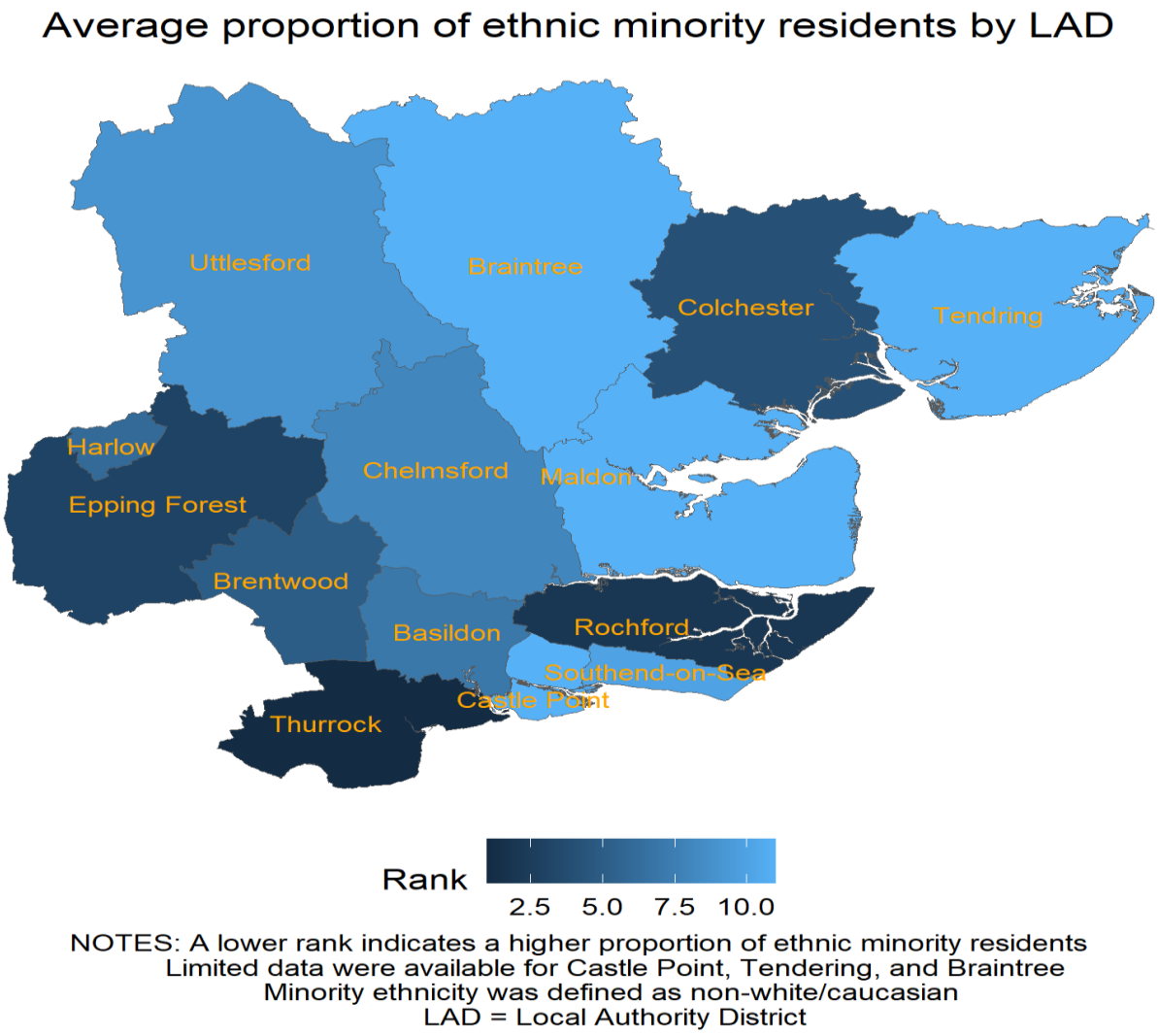
Respondents who reported being religious with a non-Christian religious background were defined here as having a minority religious background. Castle Point, Braintree and Brentwood had limited data on this factor. Weighted sums across LADs suggested that Colchester and Southend-on-Sea had the highest proportions of residents with minority religious backgrounds. Again due to the limited data in several regions, it is difficult to pinpoint the regions with a lower density of minority religious residents or to ascertain the true reliability of this data. Greater efforts need to be made to enhance data collection on characteristics such as religion and to understand how such factors may intersect with other parameters to influence mental health.



NOTES: A lower rank indicates a higher proportion of minority religious residents
Limited data were available for Castle Point, Brentwood, and Braintree
All non-christian religious backgrounds were defined as minority religions
LAD = Local Authority District

Map 16: Minority Ethnicity

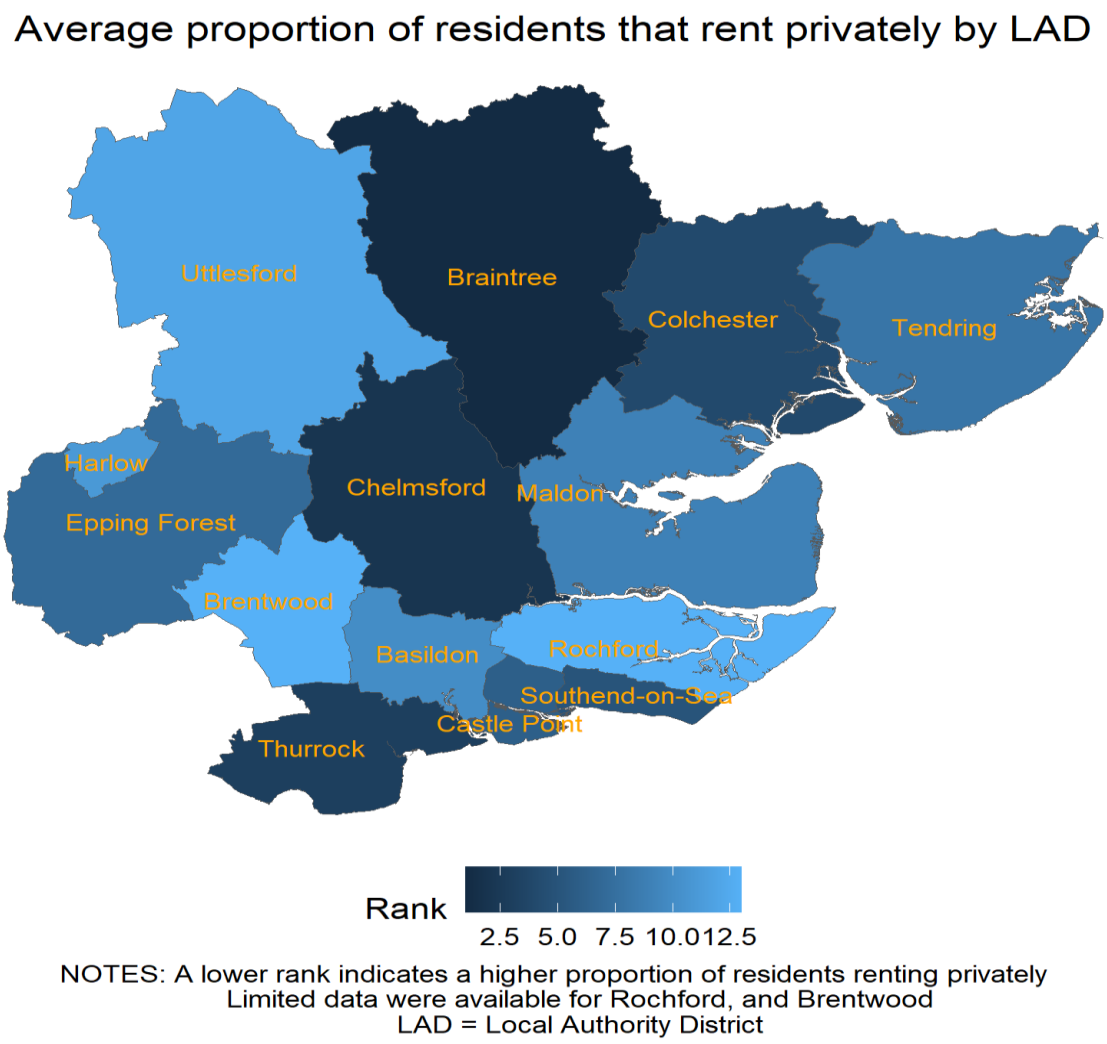
In this report, minority ethnicity refers to Black, Asian and Minority Ethnic (BAME) residents. Weighted sums for each LAD suggest that Thurrock and Rochford have the highest proportions of ethnic minority residents in Essex. These results are partially consistent with the latest Census data (6) in which 76.7% of Thurrock residents identified as white compared to over 90% for nearly all other regions. The inconsistency comes from Rochford, which our data suggests has the second-highest proportion of BAME residents, but in the latest census only 1.4% of residents identified as non-white (compared with over 8% for Colchester and Chelmsford). Thus, reinforcing that more needs to be done to enhance data quality and better understand how ethnic minority people are distributed across the LADs (e.g., in lower SEP neighbourhoods, cities, etc).



NOTES: A lower rank indicates a higher proportion of ethnic minority residents
Limited data were available for Castle Point, Tendering, and Braintree
Minority ethnicity was defined as non-white/caucasian
LAD = Local Authority District

Map 17: Housing tenure

Various reports demonstrate that privately rented accommodation in England is associated with poor quality living conditions and high levels of insecurity (8,9), thus we mapped the proportion of residents renting privately in each LAD (again derived through weighted sums). The data suggests that more people rent privately in Braintree than any other LAD in Essex. The data was limited for Rochford and Brentwood, making reliably identifying the regions with the lowest rates of private renting in Essex difficult to pinpoint. However, our data suggest that Uttlesford has the lowest proportion of residents renting accommodation from private landlords.



NOTES: A lower rank indicates a higher proportion of residents renting privately
Limited data were available for Rochford, and Brentwood
LAD = Local Authority District

Deprivation Indicators

The distinct dimensions of deprivation were measured using very specific indicators, many of which are based on receiving benefits or other fiscal supports. The figure below was taken from the English Indices of Deprivation 2019 technical report (11) and outlines the indicators included under each domain of deprivation

Figure 3.2. Domains and indicators for the Indices of Deprivation 2019

Income Deprivation 22.5%	Adults and children in Income Support families	
	Adults and children in income-based Jobseeker's Allowance families	
	Adults and children in income-based Employment and Support Allowance families	
	Adults and children in Pension Credit (Guarantee) families	
	Adults and children in Working Tax Credit and Child Tax Credit families, below 60% median income not already counted	
	Asylum seekers in England in receipt of subsistence support, accommodation support, or both	
	Adults and children in Universal Credit families where no adult is in 'Working - no requirements' conditionality regime ++	
Employment Deprivation 22.5%	Claimants of Jobseeker's Allowance, aged 18-59/64	
	Claimants of Employment and Support Allowance, aged 18-59/64	
	Claimants of Incapacity Benefit, aged 18-59/64	
	Claimants of Severe Disablement Allowance, aged 18-59/64	
	Claimants of Carer's Allowance, aged 18-59/64	
	Claimants of Universal Credit in the 'Searching for work' and 'No work requirements' conditionality groups ++	
Education, Skills & Training Deprivation 13.5%	Key Stage 2 attainment: scaled scores	Children & Young People
	Key Stage 4 attainment: average capped points score	
	Secondary school absence	
	Staying on in education post 16	
	Entry to higher education	
	Adults with no or low qualifications, aged 25-59/64	Adult Skills
	Adults who cannot speak English or cannot speak English well, aged 25-59/64	
Health Deprivation & Disability 13.5%	Years of potential life lost	
	Comparative illness and disability ratio **	
	Acute morbidity	
	Mood and anxiety disorders **	
Crime 9.3%	Recorded crime rates for: • Violence • Burglary • Theft • Criminal damage	
Barriers to Housing & Services 9.3%	Road distance to a: • Post office • Primary school • General store or supermarket • GP surgery	Geographical Barriers
	Household overcrowding	Wider Barriers
	Homelessness	
	Housing affordability	
Living Environment Deprivation 9.3%	Houses without central heating	Indoors Living Environment
	Housing in poor condition	
	Air quality	Outdoors Living Environment
	Road traffic accidents	

++ New indicators
** Modified indicators
% illustrates the weight of each domain in the Indices of Deprivation

The percentages reported in each domain box show the weight that the domain receives in the Index of Multiple Deprivation 2019. See Section 3.7 and Appendix G for description of the domain weights.

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