

Supplementary material

Mining and mapping UKRI (Parts 1 and 2)

This document catalogues the sources and calculations used in the creation of the UKRI mining and mapping regional dataset, available (along with the Mining and Mapping video report as well as this Supplementary Material document) for download at the UCL Institute of Advanced Studies EDI Research Cluster webpage: <https://www.ucl.ac.uk/institute-of-advanced-studies/edi>

PART 1

Regional maps

The shapefile of the map of England with the nine regional boundaries (North East, North West, Yorkshire and The Humber, East Midlands, West Midlands, East of England, London, South East, South West) can be accessed from the Office for National Statistics' Open Geography Portal, where they publish and update digital boundary sets for a wide range of UK geographies. Regional maps can be found under Administrative Boundaries >> Region. Boundary polygons are not part of the UKRI mining and mapping spreadsheet (a merge with the spreadsheet and the shapefile was undertaken in Python)

Direct Link:

https://geoportal.statistics.gov.uk/datasets/4fcc2a47fed4bfaa1793015a18537ac_0/explore?location=52.950000%2C-2.000000%2C6.63

(Regional boundaries 2017, clipped used)

UKRI regional data

Data on numbers of UKRI fellowships, research grants, and studentships are tabulated from the UKRI Gateway to Research portal. See the Mining and mapping video report (part 1) for a full discussion of the methods used.

Direct link: https://gtr.ukri.org/search/project?term=*

Regional universities and colleges

The number of universities and colleges per region (mentioned in the video) was gathered from the UK map of unis and colleges by region, published by UCAS (and includes conservatories). Not all of the universities and colleges on the list will be eligible for UKRI funding, but the list provides a good illustration of the spatial arrangements of UK HEI.

Direct link: <https://www.ucas.com/file/172566/download?token=bwGYCgS9>

Female earnings on the pound

This calculation was made in Python and is part of the Pandas DataFrame, not on the excel spreadsheet. Average weekly earnings for women and men were gathered from the ONS *Annual Survey of Hours and Earnings (ASHE), mean regional time series 1997 to 2020*, released November 2020 (compiled onto the UKRI mining and mapping dataset). The following column calculation was done to create female earnings on the pound (column label = earning difference):

```
region_mp['earning_difference']=((1000/region_mp.mean_weekly_earnings_male)*region_mp.mean_weekly_earnings_female)/1000
```

where region_mp is the dataframe incorporating the spreadsheet and the shapefile and ratios of women to men's earning were normalised by 1000 to get the value to the pound. The Python notebook (.py) can be made available on request.

Direct link:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/dhocs/12444annualsurveyofhoursandearningsashemeanregionaltimeseries1997to2020>

Proportion of people under an hour from mother/adult children

This data was taken from the ONS *Time taken to travel to visit relatives, by regions in England: 2017 to 2018* survey released in December 2020. Data was gathered by adding categories

- less than 15 minutes
- between 15 and 30 mins
- between 30 mins and 1 hour

for both travel time to mother and to adult children. This data is also available for travel time to father, however this was not used in the UKRI mining and mapping video report.

Direct link:

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/adhocs/12685timetakenotraveltovisitrelativesbyregionsinengland2017to2018>

Reported loneliness among persons with disabilities

Data was gathered from the ONS *Disability and Loneliness* dataset (both 2020 and 2019 are available), released February 2021, using Table 5 (regional).

Direct link:

<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/disability/datasets/disabilityandloneliness>

Proportion of persons with disability with degrees

Data was gathered from the ONS Disability and Education dataset, released February 2021, using:

- Table 7: *'Proportion of people aged 21 to 64 whose highest qualification is "degree" or have no qualification by disability status and English region, UK, year ending June 2019 to year ending June 2020'*
- Table 13: *'Proportion of disabled people aged 21 to 64 whose highest qualification is "degree" or have no qualification and their severity of impairment and English region, year ending June 2019 to year ending June 2020'*

Direct link:

<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/disability/datasets/disabilityandeducation>

Unused (additional) variables

Both the .xlsx and the .py (available on request) include a number of other variables not used in the UKRI mining and mapping video report, but that may be of use in future research, they are briefly described below:

GDHI (Gross Disposable Household Income): Regional GDHI gathered from the ONS *Regional gross disposable household income, UK: 1997 to 2018* estimates, released June 2020 -

<https://www.ons.gov.uk/economy/regionalaccounts/grossdisposablehouseholdincome/bulletins/regionalgrossdisposablehouseholdincomegdhi/1997to2018>

GDHI_growth: from dataset above

Output_per_job: gathered from the ONS Annual Regional Labour Productivity -

<https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/datasets/annualregionallabourproductivity>

Output_per_hour: gathered from user request to ONS asking for Output per hour across regions -

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/adhocs/008109outputperhourandrealmedianhourlyearningsexcludingovertime1975to2017ukindexed2015100>

PART 2

UKRI subject area data

Data on numbers of UKRI fellowships and research grants in different disciplines (Anthropology in Part 2; Sociology in Part 3; Psychology in Part 4; and Human Geography in Part 5) are tabulated from the UKRI Gateway to Research portal. Selections made under Subject for each disciplinary area are:

- Anthropology: Anthropological Methods; Anthropology and Development; Social Anthropology (N=620 fellowships and research grants)
- Sociology: Sociology (N=1382 fellowships and research grants)

- Psychology: Psychology (N=1230 fellowships and research grants)
- Human Geography: Human Geography (N=722 fellowships and research grants)

Direct link: https://gtr.ukri.org/search/project?term=*

Video credits

Intro music:

You know by Arulo

TSM by Arulo

(Royalty free and available from Mixkit - <https://mixkit.co/free-stock-music/hip-hop/>)

Outro music:

TSM by Arulo

(Royalty free and available from Mixkit - <https://mixkit.co/free-stock-music/hip-hop/>)

Sound effects:

(e.g. Large Audience Gasp, available at zapsplat.com -

https://www.zapsplat.com/?s=gasp&post_type=music&sound-effect-category-id=

Stock photos:

Royalty free and available from www.unsplash.com

Stock videos:

Royalty free and available from www.pixabay.com