

census21api: a Python Interface to 2021 England and Wales Census Data

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ons.gov.uk/datasets/create

All 331 areas available

Variables

Population type	All households	
Area type	Lower tier local authorities	Change
Coverage	England and Wales	Change
Household deprivation	<div>6 categories</div> <ul style="list-style-type: none">Household is not deprived in any dimensionHousehold is deprived in one dimensionHousehold is deprived in two dimensionsHousehold is deprived in three dimensionsHousehold is deprived in four dimensionsDoes not apply	

Using census21api

```
In [2]: ▶ from census21api import CensusAPI  
api = CensusAPI()
```

```
In [6]: ► dimensions = api.query_feature(population_type, "dimensions")
dimensions[dimensions['id'].str.startswith("hh_deprivation")]
```

Out[6]:

	id	label	description	total_count	quality_statement_text	population_type
20	hh_deprivation	Household deprivation (6 categories)	The dimensions of deprivation used to classify...	6	Caution should be used in interpreting this va...	HRP
21	hh_deprivation_education	Household deprived in the education dimension ...	A household is classified as deprived in the e...	3		HRP
22	hh_deprivation_employment	Household deprived in the employment dimension...	A household is classified as deprived in the e...	3		HRP
23	hh_deprivation_health	Household deprived in the health and disabilit...	A household is classified as deprived in the h...	3		HRP
24	hh_deprivation_housing	Household deprived in the housing dimension (3...	A household is classified as deprived in the h...	3		HRP

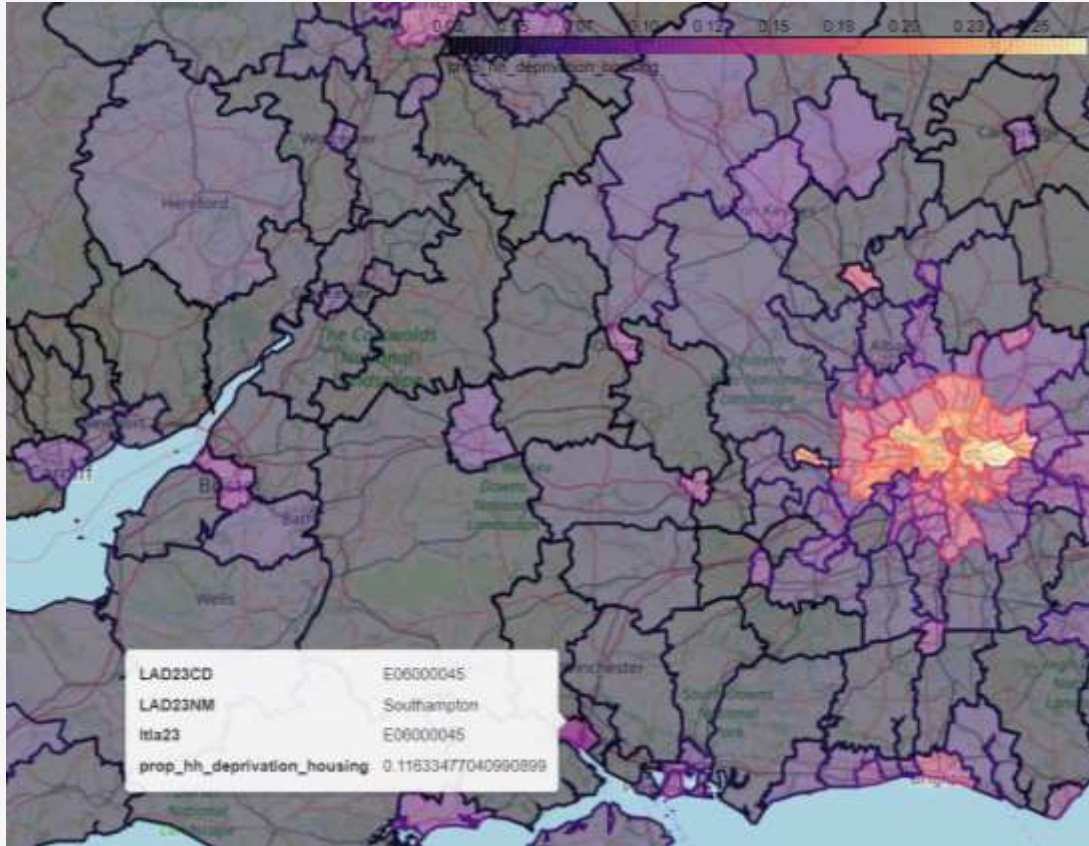
```
In [8]: ► population_type = "HRP"  
        area_type = "ltla23"  
        dimension = "hh_deprivation_housing"
```

```
In [9]: ► table = api.query_table(population_type, area_type, [dimension])  
        table.head(6)
```

Out[9]:

	ltla23	hh_deprivation_housing	count	population_type
0	E06000001	-8	0	HRP
1	E06000001	0	39304	HRP
2	E06000001	1	1626	HRP
3	E06000002	-8	0	HRP
4	E06000002	0	56978	HRP
5	E06000002	1	3284	HRP

What comes next?



- [UKCensusAPI](#) is a similar tool for the 2011 Census.
- [nomisr](#), is the same as above but for R users.
- [nismod/microsimulation](#) runs dynamic, pop and household, microsimulation models.
- [Datashine Census](#) is an interactive map.

github.com/datasciencecampus/census21api

Please ask me questions about:

- census21api
- apprenticeships
- the ONS

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