



CIS outputs for Census Phase 2


Population Statistics User Group

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Presentation overview

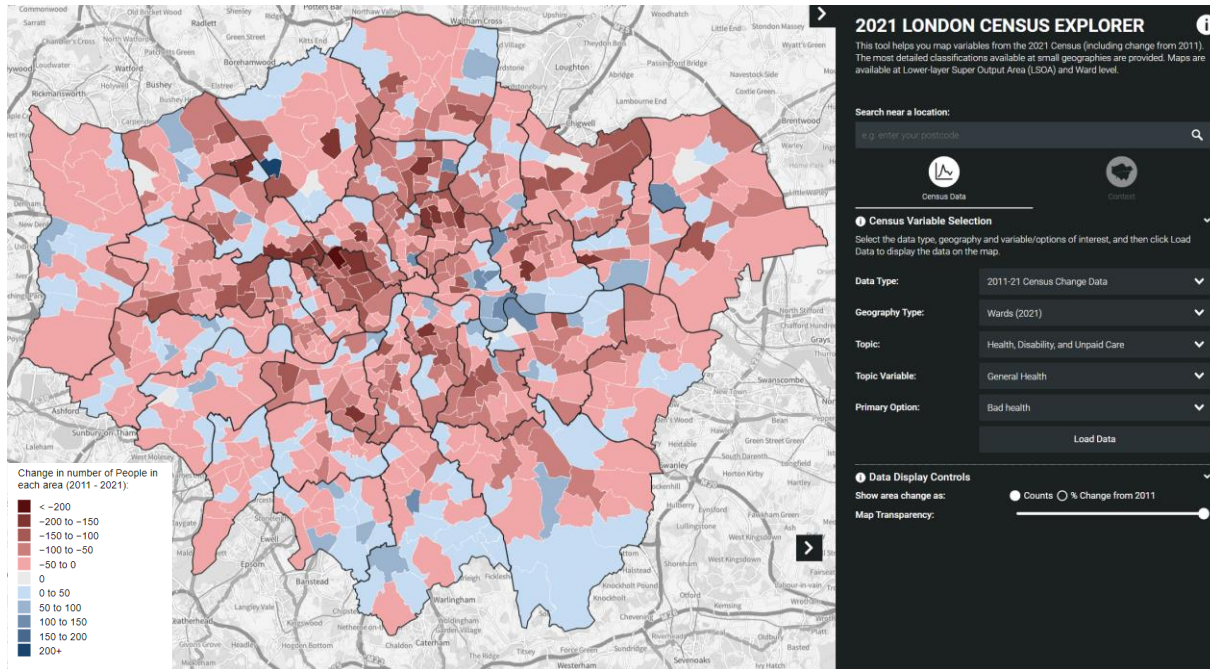
- Section 1 – Recap of phase 1 outputs
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Section 1 – Recap of phase 1 CIS outputs

Phase 1 outputs



- [Reports on selected variables](#)
 - 7 existing reports
 - Health, Disability, and Unpaid Care yet to come
- [Data provision](#)
 - Data fitted to ward and LSOA, change from 2011 calculated
- [Mapping tool](#)
 - Uses data from above
 - Shows total and % change



Section 2 – Data refitting procedures to supplement ONS phase 2 data

Area fitting

- Address-weighted fitting of OAs or LSOAs to wards
- But for multivariate data, OA and ward-level data released at same time
- Our estimates for 2021 are only slightly different from best-fit ONS estimates
- Are address-weighted estimates worth it? Trade off in category detail compared to direct ward-level download

Select area type

- ☐ England and Wales (1)
- ☐ Countries (2)
- ☐ Regions (10)
- ☐ NHS England regions (8)
- ☐ Local health boards (8)
- ☐ Integrated care boards (43)
- ☐ Sub-integrated care board locations (107)
- ☐ Upper tier local authorities (174)
- ☐ Lower tier local authorities (331)
- ☐ Westminster Parliamentary constituencies (573)
- ☐ Electoral wards and divisions (7,638)
- ☐ Middle layer Super Output Areas (7,264)
- ☐ Lower layer Super Output Areas (35,672)
- ☒ Output Areas (188,880)

The lowest level of geographical area for census statistics. Each Output Area is made up of between 40 and 250 households and a usually resident population of between 100 and 625 persons.

Continue

2011 – 2021 change

| 2021 categories | 2011 categories | Matched categories |
|----------------------|---------------------------|---------------------------|
| Ulster Scots | | Other language |
| Romany English | Gypsy/Traveller languages | Gypsy/Traveller languages |
| Irish Traveller Cant | Gypsy/Traveller languages | Gypsy/Traveller languages |

- Not trivial as categories changed between census and need to be manually matched
- As with single-variables, we can match and calculate change
- At present we plan to only do this for a select set of tables. Theoretically could do for many of the 200+ fixed tables/ready-made tables, and for selected outputs from flexible table-builder
- Any feedback on usefulness of change? Comments from existing single-variable change data?

Category expansion through estimation

Desired table

- Economic activity by sex by age (at 5 year bands)
- LSOA level



Available through flexible table-builder

- Economic activity by sex by age (10/15 year age bands) at LSOA
- Sex by age (single-year age bands) at LSOA
- Economic activity by sex by age (5 year age bands) at MSOA level



Solution

- Can use procedure called iterative proportional fitting
- Combines information from multiple data sources

Category expansion through estimation

- Long list of possibilities
 - Expand age categories for many tables
 - Expanding ethnic group categories – often FTB only gives 8 categories, rather than the 19 categories
 - Expanding economic activity categories - often “inactive” is aggregated, and it might be of interest to know inactive by due to long-term sick or disabled
 - Expand health categories – often given as “Good” or “Not good”
 - Etc.....
- Set list of tables we plan to do this for, but again can assess and respond to requests



Section 3 – Set data outputs for phase 2

Planned tables

| Table | 2011 ID | 2021 ID | Description vs ONS |
|--|----------|---------|---|
| Sex by single year of age | DC1117EW | RM200 | Exists in detail at LSOA |
| Economic activity by sex by age | DC6107EW | RM024 | Expanding age categories |
| Qualifications by sex by age | DC5107EW | RM055 | Expanding age categories |
| Disability by sex by age | DC3302EW | RM073 | Only available at MSOA – extending to LSOA |
| Ethnic group by sex by age | DC2101EW | RM032 | Expanding age categories |
| Religion by sex by age | DC2107EW | RM118 | Adding sex, expanding age categories |
| Tenure by ethnicity of HRP | DC4201EW | RM134 | Expanding ethnic group categories |
| Economic activity by ethnic group by sex | DC6201EW | RM018 | Adding sex, expanding ethnic group categories |



Section 4 – Summary

Summary of key points

- Area fitting. Address-weight to ward for 2021, for slightly better fitting and consistency with 2011? Or take best-fit directly from FTB for simplicity and more detailed categories?
- Value of change over time? Worth time investment of calculating for RM tables?
- Add any high priority tables to existing list of current planned outputs?
- CIS can consider bespoke requests for fitting tables. Need to balance against possibility of commissioning tables.