# Data Explorer Guide

This guide is intended to give a brief outline of the tools and functions available within the Data Explorer tool (which can be found in Data Tools).



The Data Explorer tool provides the user with the ability to find and isolate a single dataset and to explore and visualise the data in a few different ways. This includes visualising the data in a table format, on a time series graph, a ranked bar chart and on an interactive map. On top of this, each dataset contains a page containing the relevant metadata.

This guide will give a brief outline of how to find a dataset and how to display and use each data visualisation tool.

## How to find a dataset

To find a dataset you have two options. The first is to browse through datasets on the 'Data 'Explorer' tool and use the 'filter' tool to narrow down the datasets that are visible on the list.

The other option is to use the search function to specify with keywords what you are

looking for. Both of these options are available to use at the top of the page as shown in the image below.

## Data Explorer

If you would like to explore data in more detail, the data explorer can help.

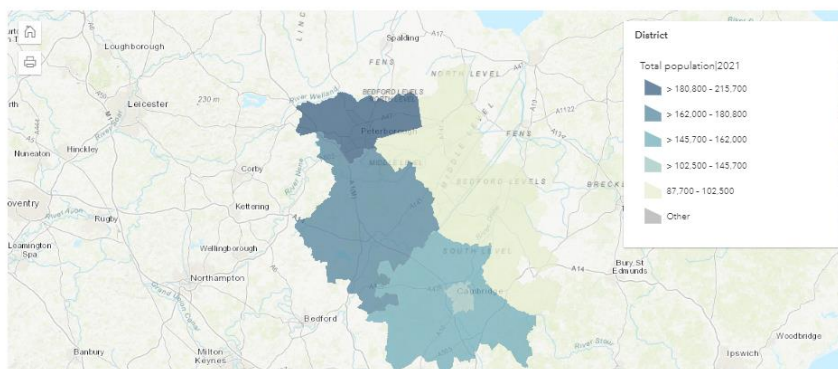Use the buttons and search boxes below to find indicators available in this site.

Search 🔍

▼ Filter

Filter

Within the 'filter' option there are three main fields which you can filter. These are, 'Theme', 'Geography' and 'Publisher'.

**Publisher**

☐ Cambridgeshire Research Group
☐ Department for Business, Energy and Industrial Strategy
☐ Department for Business, Energy and Industrial Strategy (BEIS)
☐ Department for Education
☐ Department for Education/Education and Skills Funding Agency
☐ Department for Environment, Food & Rural Affairs
☐ Department for Environment, Food and Rural Affairs
☐ Department for Transport
☐ Department for Work and Pensions
☐ Esri UK (Derived from ONS data published in NOMIS)
☐ Esri UK/ONS
☐ HM Revenue and Customs
☐ Home Office
☐ Ministry for Housing, Communities and Local Government
☐ Ministry of Housing, Communities & Local Government
☐ Ministry of Housing, Communities and Local Government
☐ NHS England
☐ NOMIS
☐ ONS
☐ Office for National Statistics

**Geography**

☐ LSOA
☐ LSOA 2021
☐ MSOA 2021
☐ District
☐ Combined Authority
☐ LA
☐ Greater Cambridge
☐ MSOA
☐ Parish
☐ Ward
☐ Region
☐ Country
☐ Primary Care Network

**Theme**

☐ Population
☐ Housing
☐ Health
☐ Children and Education
☐ Economy, Jobs and Benefits
☐ Crime
☐ Deprivation
☐ Environment
☐ Cambridgeshire and Peterborough
☐ Deprecated

All datasets have been attributed a theme.

Filtering by geography will show datasets that display the data by the chosen

geography. For example, selecting MSOA will show all datasets the data is broken down by MSOA. The data will not be exclusively MSOA data, a dataset may contain multiple geographic breakdowns, e.g. LSOA, MSOA, LTLA and UTLA.

Filtering by 'Publisher' will show all datasets from the chosen publisher only. Some publishers have multiple names e.g. ONS and Office for National Statistics so it is worth checking.

## Search

The search function is self-explanatory and useful if you know what you are looking for. The function will use the keywords entered to search through the dataset title, the metadata description.

It is not possible to search through the 'Filter' fields, e.g. you cannot search 'MSOA' to highlight the datasets that are broken down by MSOA or you cannot search 'ONS' to show all datasets published by the ONS.

If you would like to explore data in more detail, the data explorer can help.

Use the buttons and search boxes below to find indicators available in this site.

| single family household | 🔍 | | ★ Favourites  ◄ Share |

▼ Filter

**Household** composition (Census TS003) - **Single family household**    ⓘ ☆

Office for National Statistics  -  *Population*  /  *By Household*  /  *Household composition (Census TS003)*

Household composition (Census TS003) - Single family household:

This dataset provides Census 2021 estimates that classify households in England and Wales by the relationships between household members (household composition)...

( LSOA 2021 ) ( MSOA 2021 ) ( District ) ( Combined Authority ) ( LA ) ( Greater Cambridge ) ( Ward ) ( Region ) ( Country )

**Household** composition (Census TS003) - **Single family household** (rate)    ⓘ ☆

Office for National Statistics  -  *Population*  /  *By Household*  /  *Household composition (Census TS003)*

Household composition (Census TS003) - Single family household (rate):

This dataset provides Census 2021 estimates that classify households in England and Wales by the relationships between household members (household composition)...

( LSOA 2021 ) ( MSOA 2021 ) ( District ) ( Combined Authority ) ( LA ) ( Greater Cambridge ) ( Ward ) ( Region ) ( Country )

# Using the data (visualisations)

## Data

The data tab is the simplest way of viewing the table in a table format. Within the data tab it is possible to filter the data by a variety of variables, e.g. type of geography, the specific geography, timeframe and data format.

In the image below the population has been filtered to show population by district in Cambridgeshire and to show all Census data going back to 1991.

Once filtered and formatted as you want you can then download the table to a CSV (Excel) file to use that data as you wish.



## Map

The map option quickly enables you to plot the data on a map with the available and chosen geography. For example the map below shows that firstly the map has been filtered to show the data by LSOA area, however it has also been filtered to only show the LSOAs within the ward of Cambourne. This means you can filter down to low level geographies and can mask the other areas that you don't wish to see. It is possible to filter down even further to only show a specific LSOA or other desired geography such as ward or MSOA.
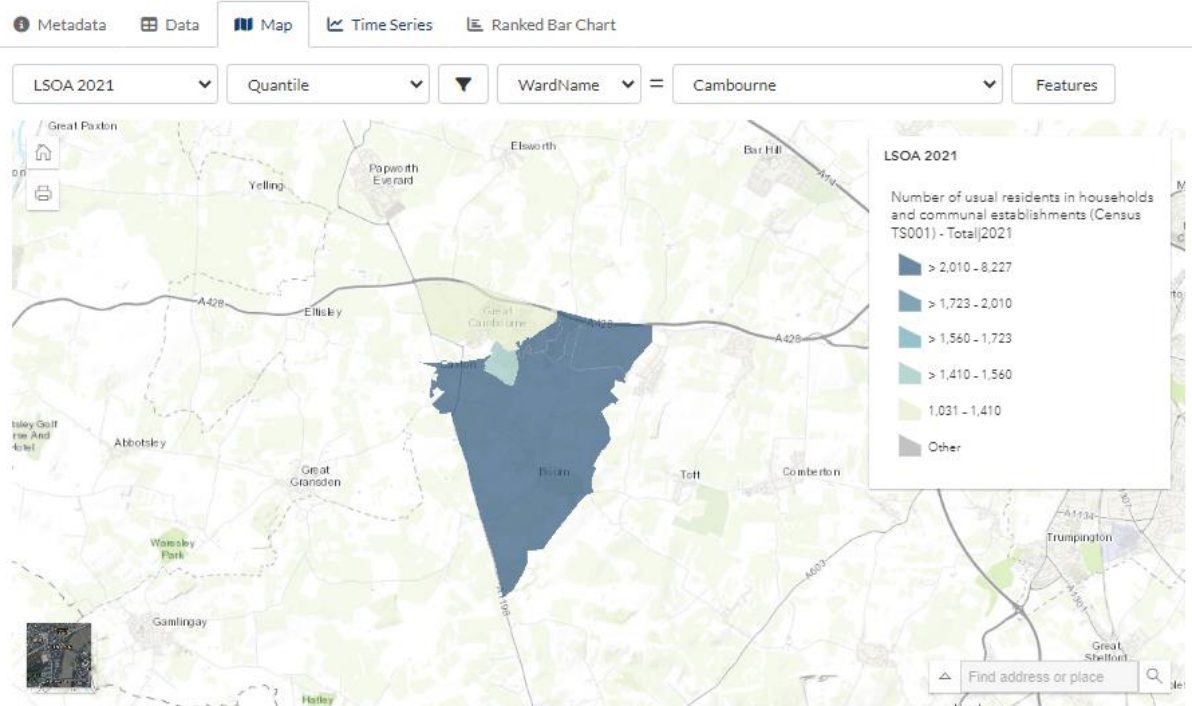
## Print

Also in the map feature is the ability to print the 'current' map view so you can share the map you have created. To do this click on the printer icon in the top left handside of the window. A user can choose the format of the export, can add a title and can choose between displaying the whole window or to just show the map.
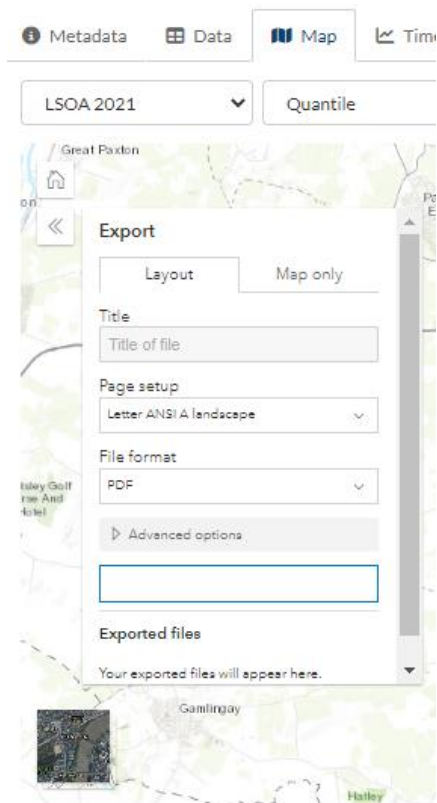
You also have the ability to share the 'current' map view by simply copying and pasting the URL from your address bar. This means you can send the link to someone else and they can see exactly the same map as you but then they have the ability to edit and make changes themselves if need be. For example the map above can be found here - [Number of usual residents in households and communal establishments (Census TS001) - Total | Cambridgeshire Insight – Data Explorer](#)

## Time Series

The time series tab enables a user to plot and visualise data over time in a variety of formats. For example with the Census 2021 data being released recently a user may wish to see 2001, 2011 and 2021 data on the same graph to show the change over time as shown below.
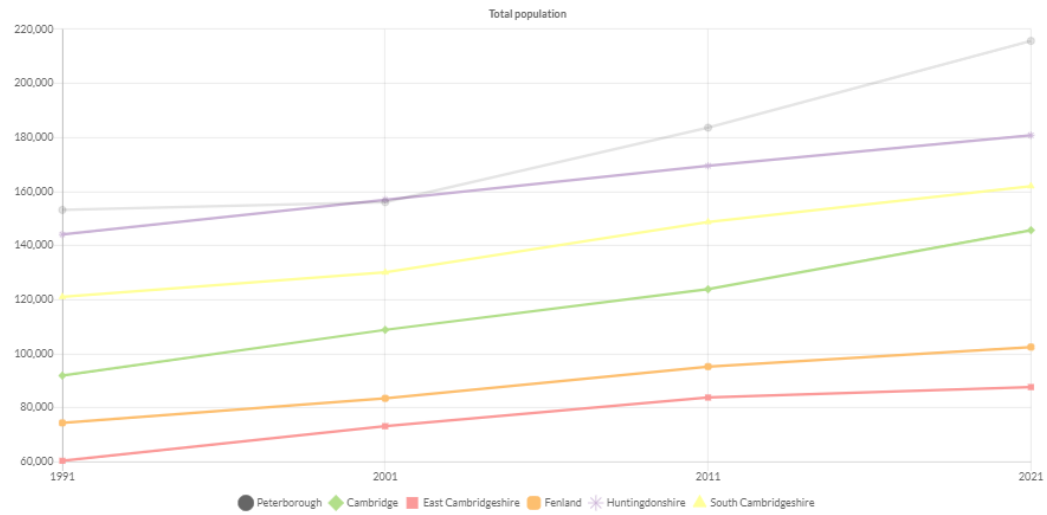
**Total population**

ONS

*Population / Census 2021 / Summary*

This dataset combines the first release results for 2021 - available at local authority, region and Country level for England and Wales, with the closest equivalent data selected from NOMIS for 2011, 2001 and 1991 to see change over time in the headline data.

| ⓘ Metadata | ⊞ Data | 🗺 Map | ⚊ Time Series | ⚊ Ranked Bar Chart |

| District ▾ | Line ▾ | ⬇ | ▼ |

Total population

220,000

200,000

180,000

160,000

140,000

120,000

100,000

80,000

60,000

1991          2001          2011          2021

● Peterborough   ◆ Cambridge   ▪ East Cambridgeshire   ▪ Fenland   ✳ Huntingdonshire   ▲ South Cambridgeshire

A user can choose between a line graph, a bar graph or a stacked bar graph.