## **USER GUIDE**

## **General Information**

The SIMD Map for Multiple Years is available [here](https://rpubs.com/hibsgirl42/609494).

The map aims to present the most up to date data but comes with no warranty as to the accuracy of the data shown.

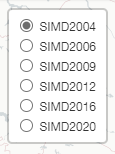
The map was designed in R using a variety of libraries:

* [SPARQL](https://cran.r-project.org/web/packages/SPARQL/SPARQL.pdf) for the ability to convert SPARQL queries to an R dataframe
* [dplyr](https://www.r-project.org/nosvn/pandoc/dplyr.html) to transform the data
* [readxl](https://readxl.tidyverse.org/) to read in external Excel files
* [leaflet](https://rstudio.github.io/leaflet/) to create the interactive choropleth map
* [rgdal](https://cran.r-project.org/web/packages/rgdal/index.html) to provide bindings to the geospatial data

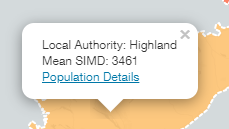
The map is currently published on the web using RPubs, a free web publishing utility from RStudio.

## **How to Use**

The map consists of several layer options, one for each of the years SIMD data is available. The user can select the year they are interested in by selecting the year from the panel at the top right hand of the map.



Once a year has been selected, the user can obtain further details on each Local Authority Area by clicking them on the map. A popup will appear showing the mean SIMD score for the Local Authority selected, plus a link to the Population Details page giving various statistical information such as births, deaths, etc.



To zoom in and out, use the “+” and “-” buttons on the top left corner. On a tablet pinch to zoom should work, however in order to make full use of the map a screen of at least 10 inches and a mouse are recommended.

## **Public Sector and Ordnance Survey Data Attribution**

The map contains public sector information licensed under the [Open Government Licence v3.0](http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/) and [Open Geography Portal](http://geoportal.statistics.gov.uk/) data © [Crown copyright](http://www.nationalarchives.gov.uk/information-management/re-using-public-sector-information/copyright-and-re-use/crown-copyright/).

## **Data Sources**

All the data shown on the map for the SIMD has already been published as open data by the Scottish Government. Additional information on each of the Local Authority Areas was obtained from the [Council Area Profiles](https://www.nrscotland.gov.uk/statistics-and-data/statistics/stats-at-a-glance/council-area-profiles) created by the National Records of Scotland.

Spatial data was captured using Open Geography Portal basemaps and plotting was checked against the [World Geodetic System 1984](https://confluence.qps.nl/qinsy/latest/en/world-geodetic-system-1984-wgs84-182618391.html) (WGS84).

## **Source Code**

The source code and all relevant files are available from [GitHub](https://github.com/jac-macm/dissertation-15011617)under an [GNU General Public License](http://www.gnu.org/licenses/gpl-3.0.html).