

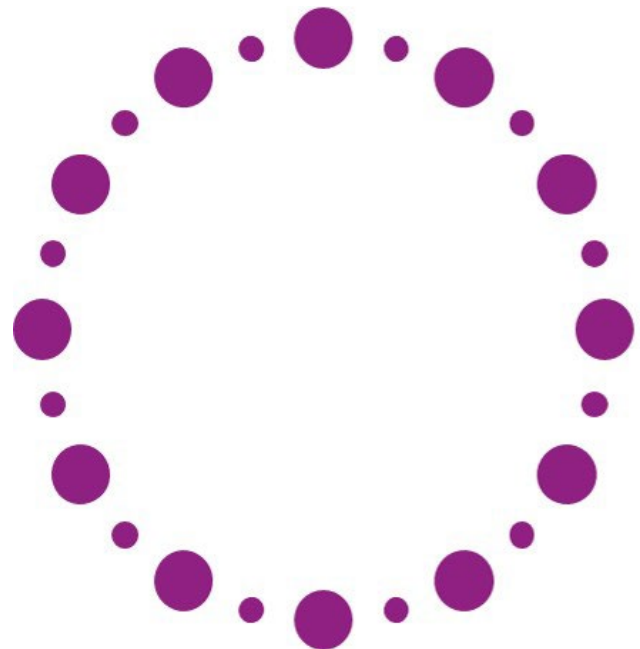
**census**  
2021



**Census 2021**

# **Grid Square product guidance note**

14 December 2023



[nisra.gov.uk/census2021](https://nisra.gov.uk/census2021)

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## 1. Purpose of the Grid Square product

The vast majority of census outputs are presented as aggregations of statistical geographies, which are based upon the local government boundaries for Northern Ireland, for example Data Zones aggregated to District Electoral Areas and Local Government Districts. This can lead to difficulties when considering trends over time as statistical and administrative geographies are regularly reviewed, which often results in changes to their boundaries. For example, in 2015 there was a reconfiguration from 26 to 11 Local Government Districts.

In order to permit the examination of trends over time for consistent spatial units, NISRA has made available Grid Square statistics for every census since 1971. The geographic base for these outputs is the Irish Grid, with census statistics produced for 100m and 1km grids.

## 2. Range of variables available

The range of outputs in the Grid Square product is restricted compared to standard outputs. This is because of the guarantees that Census Office provides regarding the confidentiality of individual census returns. With a wide range of census outputs published down to Data Zone level, the publication of further outputs on a second small geographic base (Grid Squares) could introduce the risk of statistical disclosure through the differencing of outputs. In order to protect confidentiality, Grid Square outputs are mostly restricted to univariate outputs that, in broad terms, reflect the content of the Census 2021 main statistics.

The full list of variables within the Grid Square product is detailed in the [Census 2021 Grid Square variable code book \(Excel, 141 KB\)](#).

## 3. Constraints on Grid Square outputs

There are 1.42 million 100m x 100m Grid Squares covering Northern Ireland. Only 151k (10%) of these 100m Grid Squares contain usual residents based on Census 2021, and even within these populated Grid Squares the majority contain only small numbers of households and residents. In order to protect confidentiality, Grid Square statistics have been provided only for Grid Squares that contain at least 30 usual

residents in 10 households. This leads to the availability of Grid Square statistics for approximately 20,400 100m Grid Squares and approximately 6,500 1km Grid Squares.

For any Grid Square that falls below these publication thresholds (30 usual residents in 10 households), Census Office will provide the number of households in the Grid Square in order that users can map the broad spatial distribution of households in sparsely populated areas.

#### **4. Accessing the Grid Square outputs**

The Grid Square outputs are available to download from [Census 2021 Grid Square product for Northern Ireland webpage](#), the page includes:

- Census 2021 Grid Square guidance note
- Census 2021 Grid Square variable code book
- Census 2021 Grid Square product (1km)
- Census 2021 Grid Square product (100m)

The [Grid Square products webpage](#) of the NISRA website gives more information on the Irish Grid and Grid Square references. A range of Grid Square digital boundaries in ESRI Shapefile, GeoJSON and Geodatabase formats are available to download:

- [1km Grid Square](#)
- [100m Grid Square](#)
- [Combined Grid Square](#)

The Grid Square outputs have been developed using the same systems as all Census 2021 outputs, consequently have post tabular cell key perturbation included. Further details on this disclosure control technique and the others used for Census 2021 can be found in our [Statistical Disclosure Control Methodology guidance note \(PDF, 169 KB\)](#).