

ORDNANCE SURVEY GB

# OS OPEN BUILT UP AREAS™ – OVERVIEW

## Version history

Version	Date	Description
1.0	11/2022	Initial version.

## Purpose of this document

This document provides information about and insight into the OS Open Built Up Areas product and its potential applications. For more information on the contents and structure of OS Open Built Up Areas, please refer to the Technical Specification.

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## Contact details

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# I. Introduction

OS Open Built Up Areas is a dataset representing the built-up areas of Great Britain. It was designed primarily to underpin the statistical analysis that contributes to policy enablement across the public sector.

The Office for National Statistics (ONS) and Scottish Government made significant contributions in the design of the dataset to ensure it is fit for purpose and focussed on the needs of the wider public sector.

OS Open Built Up Areas is released and maintained as an OS OpenData product with Open Government Licensing (OGL), which means that anyone can use this data for a wide range of purposes.

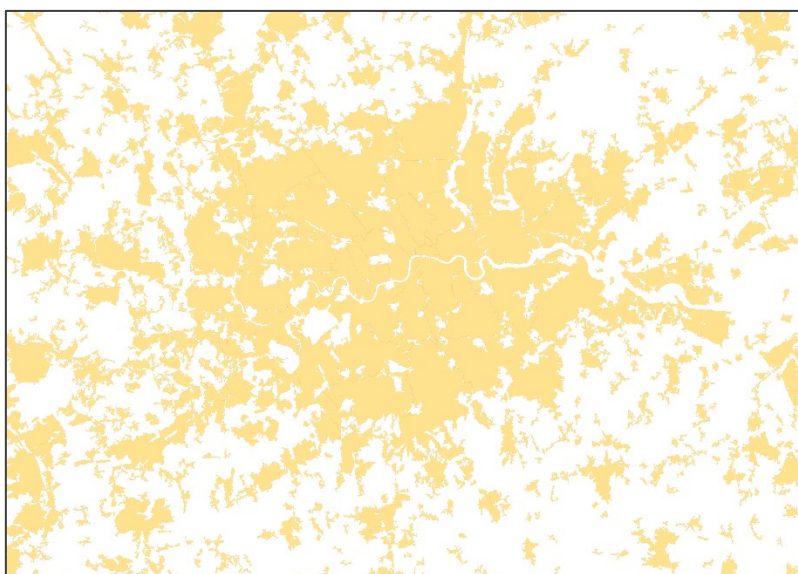


Figure 1: OS Open Built Up Areas.

## I.1 Key benefits of the product

- Specifically designed for statistical analysis to support policy development. The product was co-designed with ONS and Scottish Government to fulfil their requirements. This collaboration allowed OS to create a customer-focussed product that is precisely suitable for its purpose.
- Comprised of three feature types that enable a wide range of statistical analysis:
  - **Built Up Areas** is the aggregation of Built Up Extents and Non Built Up Extents.
  - **Built Up Extents** is the representation of built-up areas within the extent of Built Up Areas.
  - **Non Built Up Extents** is the representation of non-built-up areas within the extent of Built Up Areas.
- Comprises only built-up areas of 200 000 m<sup>2</sup> (20 ha) or more, in accordance with customer requirements.
- Area values are provided in square metres (m<sup>2</sup>) and hectares (ha) to support interoperability with other OS datasets.

- Feature types contain (or reference) Government Statistical Service (GSS) codes to facilitate compatibility and interoperability with related public sector datasets referencing GSS codes.
- Includes Built Up Area names in alternative languages (Gaelic and Welsh), where available.
- Built Up Areas with the same name are easily distinguished by the lower-tier local authority or district name that is appended in brackets.
- Supplied in two widely used formats, GeoPackage and CSV (comma-separated values), that are both easy to load into geographic information systems (GIS) and databases. GeoPackage is an Open Geospatial Consortium (OGC) standard format.
- Open Government Licensing (OGL) means the data is available to everyone free at the point of use, with no restrictions on use.

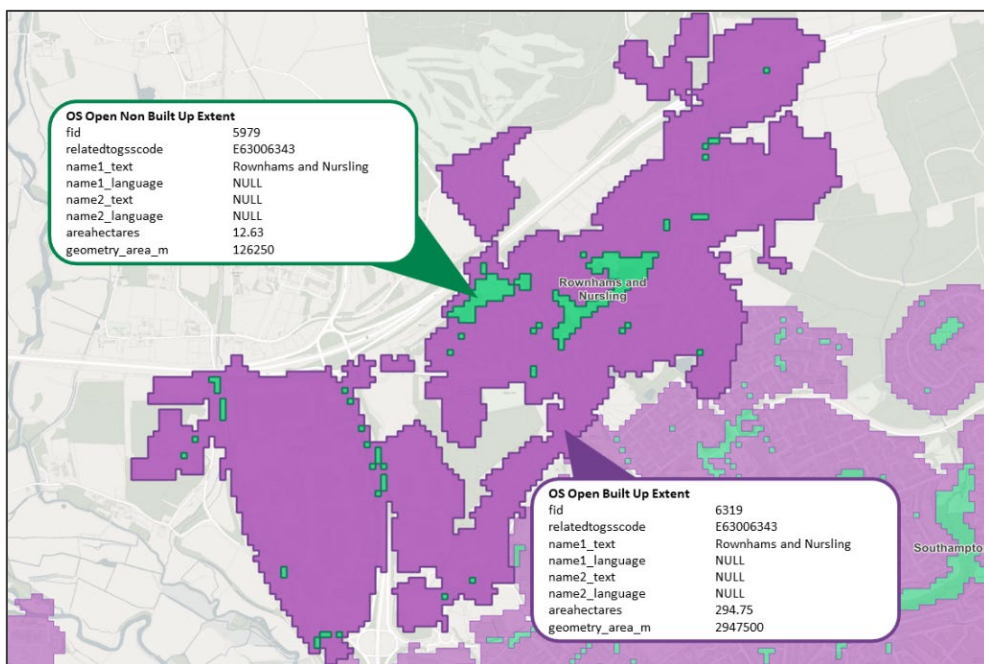


Figure 2: Built Up Extents and Non Built Up Extents Feature Types and attribution.



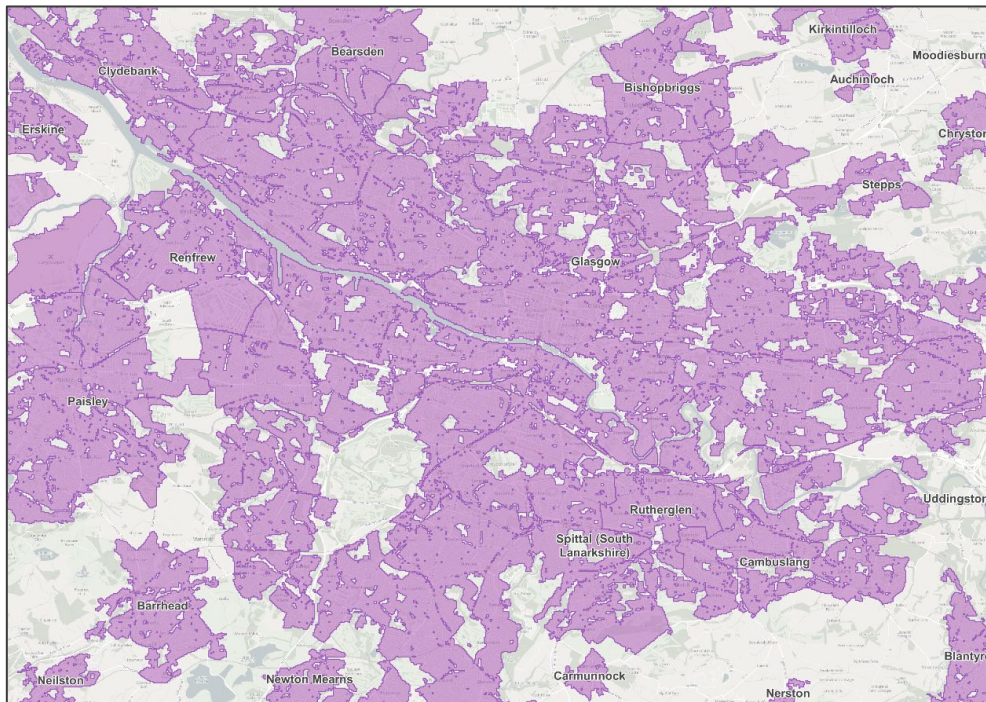


Figure 3: Built Up Extents Feature Type.

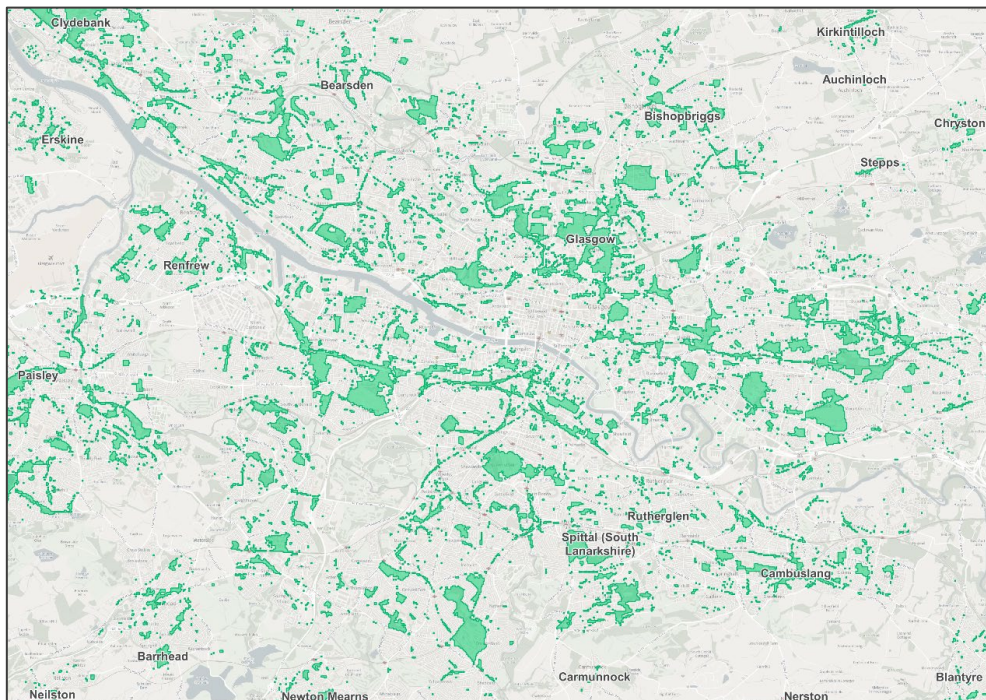


Figure 4: Non Built Up Extents Feature Type.

## 1.2 Product applications

- OS Open Built Up Areas enables policy makers and analysts, both nationally and locally, to conduct analysis corresponding to *actual* urban extents, for example, at a town, city, and village level. This allows economic, social, and environmental issues to be understood on the basis of the *actual* settlements in which most people in Great Britain live. These insights can be invaluable in the design and implementation of policies, such as, Levelling Up and Net Zero.
- The product can be used to monitor changes related to Built Up Areas over time to improve understanding of economic, social, and environmental factors. It also provides a means to measure the effectiveness of policy delivery and to improve planning and services.
- Built Up Extents can support demographic population density statistics because they represent the actual places in which people live and work.
- Non Built Up Extents can provide insights into non-built-up areas that can be used to inform and calculate statistics, such as, the impact of natural capital on house prices.
- The use of GSS codes enables linking to other statistics and datasets for better asset management in Built Up Areas. This improves consistency and accuracy in decision making and planning.
- The dataset can be used to create thematic mapping and data visualisations linked to Government-recognised Built Up Areas.

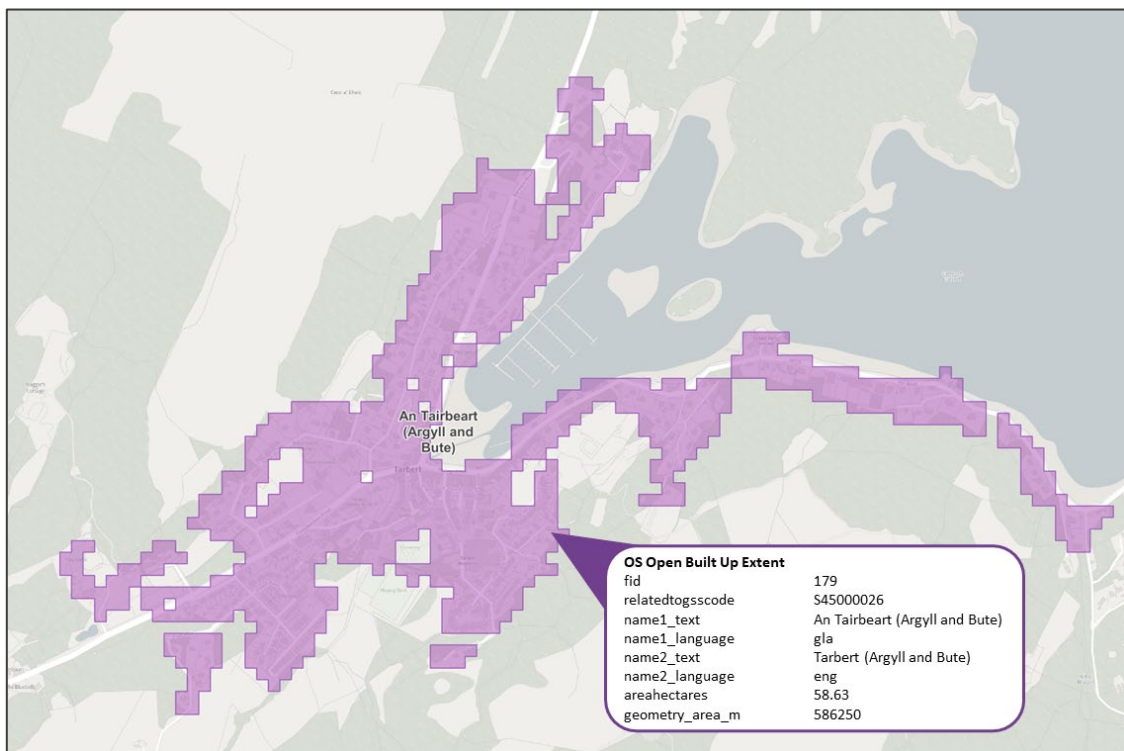


Figure 5: Built Up Extents Feature Type and attribution.

## 2. Product details

### 2.1 Feature types

OS Open Built Up Areas is classified into three feature types:

- **Built Up Areas** is the aggregation of Built Up Extents and Non Built Up Extents.  
*This is a multipart area feature with a single Government Statistical Service (GSS) code and name or names.*
- **Built Up Extents** is the representation of built-up areas only within the extent of Built Up Areas. This is the area that remains after Non Built Up Extents have been removed from Built Up Areas.  
*This is a multipart area feature with the same GSS code as the related Built Up Areas with the same name or names.*
- **Non Built Up Extents** is the representation of non-built-up areas within the extent of Built Up Areas.  
*This is a multipart area feature with the same GSS code as the related Built Up Areas with the same name or names.*

Each feature type has associated attribution. You can find additional information in the *OS Open Built Up Areas Technical Specification*.

### 2.2 Standards

OS Open Built Up Areas is designed to conform to OGC standards.

### 2.3 Coordinate reference system

OS Open Built Up Areas uses the British National Grid (BNG) coordinate reference system. BNG uses the OSGB36 geodetic datum and a single Transverse Mercator projection for the whole of Great Britain. Positions on this projection are described using easting and northing coordinates in units of metres. The BNG is a horizontal spatial reference system only; it does not include a vertical (height) reference system.



## 3. Product supply

### 3.1 Available formats

OS Open Built Up Areas is supplied in GeoPackage and CSV formats.

### 3.2 Supply mechanism

OS Open Built Up Areas is supplied as an online download. You can download the GeoPackage or CSV formats from the [OS Data Hub \(https://osdatahub.os.uk/\)](https://osdatahub.os.uk/).

### 3.3 Coverage

Coverage for OS Open Built Up Areas is all of Great Britain.

### 3.4 File size

- GeoPackage:
  - Delivered in a single compressed file (ZIP) containing all three feature types.
  - File size is approximately 278.9MB.
  - Data is not encrypted.
- CSV:
  - Delivered in three individual files, one for each feature type.
  - File size of each file is approximately 39.08MB.
  - Data is not encrypted.

### 3.5 Update schedule

The first release of OS Open Built Up Areas was in December 2022. The second release is scheduled for April 2024. After this, the product is scheduled to be released every two years. This schedule was agreed with ONS and Scottish Government.

## Annex A: Additional resources

You can find further information about the product and how to use it on the [OS Open Built Up Areas Product Support page of the OS website \(https://www.ordnancesurvey.co.uk/business-government/tools-support/os-open-built-up-areas\)](https://www.ordnancesurvey.co.uk/business-government/tools-support/os-open-built-up-areas).

We recommend you read the following:

- *Getting Started with GeoPackage*
- *OS Open Built Up Areas – Technical Specification*