

# Gridded statistics at Eurostat-GISCO

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Since GEOSTAT projects, Eurostat has been promoting gridded statistics for more than a decade. Recently, the release of the census 2021 population grid is one of the main achievements of the ESS, with the detailed description of the European Union population distribution at 1km resolution. In addition, several gridded statistical products have been developed at Eurostat-GISCO to further support Eurostat and the European Commission with geographically detailed statistics.

A first development concerns accessibility indicators to basic services in Europe. Eurostat publishes datasets describing main healthcare and education services in Europe, including their location. This information is used to compute various accessibility indicators using a road transport network and GIS-based network analysis methods. This results in a 1km resolution gridded statistical product with indicators on driving time to the nearest services for years 2021 and 2023.

A second development concerns building demography indicators. National Mapping and Cadastral Agencies produce vector datasets describing buildings, such as their type, use and lifecycle information. Statistical indicators are derived from these datasets using GIS-based methods on a 100m resolution grid. The building stock is evaluated as total ground and floor area, for various types of buildings: Residential, activity, buildings with a cultural value, etc. These indicators inform on the urban fabric structure and its evolution. It is combined with resident population figures at 1km resolution to assess demographic pressure on residential buildings stock. Using asymmetric disaggregation, it is used to disaggregate population statistics from 1km to 100m resolution.