OpenGeoEdu Exercise: Advanced

Measure and detection of changes in settlement and population density (SuV)

Spatial level:
Any administrative levels (city district, municipality, county, spatial planning region, federal state, national)

Problem
The Basic exercise unit describes the possibility of evaluating, visualizing and exploring the land use share for the settlement and transport purpose (SuV) at national level. In this part you can formulate independent questions regarding the SuV share and then continue working with the help of the interactive WebGIS service of the IOER Monitor. An exemplary list of topics that you can work on includes:

- Using more than one spatial analysis level for special findings
- Comparison of SuV shares with other indicators, e.g. population, varied by size of municipality (if required, you can also access the IOER monitor data as CSV)
- Quantification and combination of land use changes with other indicators (also from other WebGIS services or statistical data services)
- Comparison of the results by using different classification methods
- Visualization and publication of the results as an online map service (Please note the terms of use)
- Linking of administrative geometries from the VGI, e.g. OpenStreetMap, with the SuV share values

Hint:

A selection of scientific contributions to this topic can be found here:

Behnisch, Martin; Kretschmer, Odette; Meinel, Gotthard (Hrsg.): Flächeninanspruchnahme in Deutschland: Auf dem Wege zu einem besseren Verständnis der Siedlungs- und Verkehrsflächenentwicklung. Berlin: Springer Spektrum, 2018.

Schorcht, Martin; Krüger, Tobias; Meinel, Gotthard: Measuring land take: usability of national topographic databases as input for land use change analysis: a case study from Germany, In: ISPRS International Journal of Geo-Information 5 (2016) 8, Nr. 134, S. 20.

You can find various data offers on: https://portal.opengeoedu.de/

When publishing maps, please consider the terms of use for geodata and services of the IOER Monitor.