



## INDICATOR 10: Altitudinal Conditionality of the Population Density' Changes

### a) File Name: **Alt\_Pop\_Dens\_Settl.shp**

➤ Coordinate Reference Systems: WGS 84 / UTM zone 34N (EPSG:32634)

### b) File Name: **Alt\_Pop\_Dens\_Mun.shp**

➤ Coordinate Reference Systems: WGS 84 / UTM zone 34N (EPSG:32634)

Attribute	Alias	Pseudonim
MatBrO	Municipality identification number	Matični broj opštine
MatBrNas	Settlement identification number	Matični broj naselja
ImeNasCir	Name of the settlement in Cyrillic	Ime naselja (ćirilica)
ImeNasLat	Name of the settlement in Latin	Ime naselja (latinica)
ImeOpsCir	Name of the municipality in Cyrillic	Ime opštine (ćirilica)
ImeOpsLat	Name of the municipality in Latin	Ime opštine (latinica)
AREA_1	Area of altitudinal zone up to 200 m a.s.l. (km <sup>2</sup> )	Površina visinske zone do 200 m a.s.l. (km <sup>2</sup> )
AREA_2	Area of altitudinal zone 200–500 m a.s.l. (km <sup>2</sup> )	Površina visinske zone 200–500 m a.s.l. (km <sup>2</sup> )
AREA_3	Area of altitudinal zone 500–800 m a.s.l. (km <sup>2</sup> )	Površina visinske zone 500–800 m a.s.l. (km <sup>2</sup> )
AREA_4	Area of altitudinal zone 800–1000 m a.s.l. (km <sup>2</sup> )	Površina visinske zone 800–1000 m a.s.l. (km <sup>2</sup> )
AREA_5	Area of altitudinal zone 1000–1500 m a.s.l. (km <sup>2</sup> )	Površina visinske zone 1000–1500 m a.s.l. (km <sup>2</sup> )
AREA_6	Area of altitudinal zone over 1500 m a.s.l. (km <sup>2</sup> )	Površina visinske zone preko 1500 m a.s.l. (km <sup>2</sup> )
POP_1	Population count in altitudinal zone up to 200 m a.s.l.	Broj stanovnika u visinskoj zoni do 200 m a.s.l.
POP_2	Population count in altitudinal zone 200–500 m a.s.l.	Broj stanovnika u visinskoj zoni 200–500 m a.s.l.
POP_3	Population count in altitudinal zone 500–800 m a.s.l.	Broj stanovnika u visinskoj zoni 500–800 m a.s.l.
POP_4	Population count in altitudinal zone 800–1000 m a.s.l.	Broj stanovnika u visinskoj zoni 800–1000 m a.s.l.
POP_5	Population count in altitudinal zone 1000–1500 m a.s.l.	Broj stanovnika u visinskoj zoni 1000–1500 m a.s.l.



Attribute	Alias	Pseudonim
POP_6	Population count in altitudinal over 1500 m a.s.l.	Broj stanovnika u visinskoj zoni preko 1500 m a.s.l
DENS_1	Population density in altitudinal zone up to 200 m a.s.l. (inh./km <sup>2</sup> )	Gustina naseljenosti u visinskoj zoni do 200 m a.s.l. (st/km <sup>2</sup> )
DENS_2	Population density in altitudinal zone 200–500 m a.s.l. (inh./km <sup>2</sup> )	Gustina naseljenosti u visinskoj zoni 200–500 m a.s.l (st/km <sup>2</sup> )
DENS_3	Population density in altitudinal zone 500–800 m a.s.l (inh./km <sup>2</sup> )	Gustina naseljenosti u visinskoj zoni 500–800 m a.s.l (st/km <sup>2</sup> )
DENS_4	Population density in altitudinal zone 800–1000 m a.s.l (inh./km <sup>2</sup> )	Gustina naseljenosti u visinskoj zoni 800–1000 m a.s.l (st/km <sup>2</sup> )
DENS_5	Population density in altitudinal zone 1000–1500 m a.s.l (inh./km <sup>2</sup> )	Gustina naseljenosti u visinskoj zoni 1000–1500 m a.s.l (st/km <sup>2</sup> )
DENS_6	Population density in altitudinal over 1500 m a.s.l. (inh./km <sup>2</sup> )	Gustina naseljenosti u visinskoj zoni preko 1500 m a.s.l (st/km <sup>2</sup> )

Note. -9999 = No permanent inhabitants; -99999 = No Data

**Description of Indicator:** Altitudinal Conditionality of the Population Density' Changes indicator shows the population density (inh./km<sup>2</sup>) by hypsometric zones (< 200 m a.s.l., 200–500 m a.s.l., 500–800 m a.s.l., 800–1000 m a.s.l., 1000–1500 m a.s.l., > 1500 m a.s.l.) within settlement/municipality. Altitude is usually treated as one of the limiting factors of the population's spatial distribution. With the change of altitude, the morphological types of settlements also change, and as a result, the concentration of the population in an area varies. For the indicator calculation, the area under a certain hypsometric zone and population count for the same zone were calculated. The density (inh./km<sup>2</sup>) is calculated by dividing the population count by the area of the hypsometric zone for settlement/municipality.

#### Source data for indicator calculation

Type of data	Source
Elevation data	<a href="#">European Digital Elevation Model (EU-DEM) version 1.1 [European Environment Agency, 2016]</a>
Population count*	<a href="#">GHS-POP R2019A dataset—GHS population grid multitemporal [European Commission, Joint Research Center, 2019], dataset for 2015</a>
Administrative units**	<a href="#">GeoSrbija [Open data of the National Data Infrastructure, Republic Geodetic Authority, n.d.]</a>

\* Population data for municipalities Preševo and Bujanovac are not included in datasets. Accordingly, the indicator values within these administrative units are missing.



\*\* GeoSrbija (Open Data of the National Data Infrastructure, Republic Geodetic Authority, n.d.) from which the administrative settlements boundaries were taken have no data for the province Kosovo and Metohija. Accordingly, these administrative units were not included in the analysis.