



REPUBLIC OF CROATIA



CROATIAN BUREAU OF STATISTICS

**QUALITY REPORT FOR STATISTICAL SURVEY**  
**Subnational Statistics**  
**For 2019**

Organisational unit: Geoinformation System Development Unit  
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## 0. Basic information

- Purpose, goal, and subject of the survey

Subnational statistics is a project of the European Commission in which the Republic of Croatia participates with seven cities: Zagreb, Rijeka, Split, Zadar, Pula, Osijek and Slavonski Brod. There is a growing demand for an assessment of the quality of life in European cities, where a significant proportion of European Union citizens live. The subnational statistics data collection is a joint effort by the DG REGIO, the National Statistical Institutes and Eurostat to provide reliable and comparable information on selected urban areas in Member States of the European Union.

- Reference period

Calendar year

- Legal acts and other agreements

Commission Regulation (EC) No 1205/2008 of 3 December 2008 establishing Directive 2007/2/EC of the European Parliament and of the Council as regards metadata (OJ L 326, 4.12.2008)

Commission Regulation (EC) No 976/2009 of 19 October 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community as regards network services (OJ L 274, 20.10.2009 .)

Commission Regulation (EU) No 268/2010 of 29 March 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council on access to the spatial data sets and services of the Member States by Community institutions and bodies under harmonized conditions (OJ L 83, 30.3.2010)

Commission Regulation (EU) No 102/2011 of 4 February 2011 amending Regulation (EU) No 1089/2010 implementing Directive 2007/2/EC of the European Parliament and of the Council on the interoperability of spatial data sets and services (OJ L 31, 5.2.2011)

Commission Regulation (EU) No 1089/2010 on the implementation of Directive 2007/2/EC of the European Parliament and of the Council on the interoperability of spatial data sets and services (OJ L 323, 8.12.2010)

- Classification system

Degree of Urbanisation – DEGURBA

- Concepts and definitions

Variables: demography, social aspects, economy, training and education, environment, travel and transport, culture and recreation.

- Statistical units

City

Definition of the city is based on the presence of an "urban centre", that is, a new spatial concept based on high-density population grid cells.

Step 1: All grid cells with a density of more than 1 500 inhabitants per sq. km are selected.

Step 2: The contiguous high-density cells are then clustered, gaps are filled and only the clusters with a minimum population of 50 000 inhabitants are kept as an "urban centre".

Step 3: All the municipalities (local administrative unit level 2 – LAU 2) with at least half their population inside the urban centre are selected as candidates to become part of the city.

Step 4: The city is defined ensuring that:

- a) there is a link at the political level
- b) at least 50% of the city population lives in the urban centre
- c) at least 75% of the population of the urban centre lives in the city.

#### Functional urban area (FUA)

Functional urban area consists of a city and its commuting zone. Once all cities have been defined, the commuting zone can be identified based on commuting patterns using the following steps:

Step 1: If 15% of employed persons living in one city work in another city, these cities are treated as connected cities. In this case, the first city is a part of the functional urban area of the second city and does not have its own FUA.

Step 2: All municipalities with at least 15% of their employed residents working in a city are identified.

Step 3: Municipalities surrounded by a single functional area are included and non-contiguous municipalities are excluded.

Below are cartographically presented functional urban areas of the cities of Zagreb, Split, Rijeka, Osijek, Zadar, Slavonski Brod and Pula.

FIG. 1: FUNCTIONAL URBAN AREA (FUA) OF THE CITY OF ZAGREB

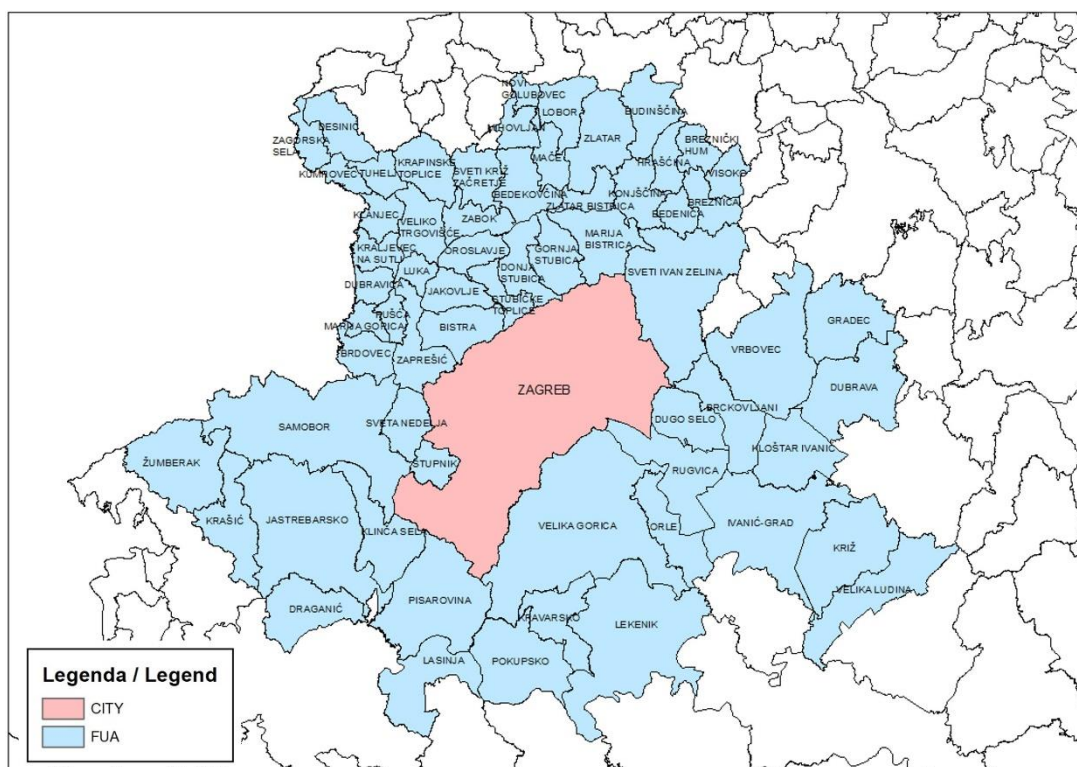


FIG. 2: FUNCTIONAL URBAN AREA (FUA) OF THE CITY OF SPLIT

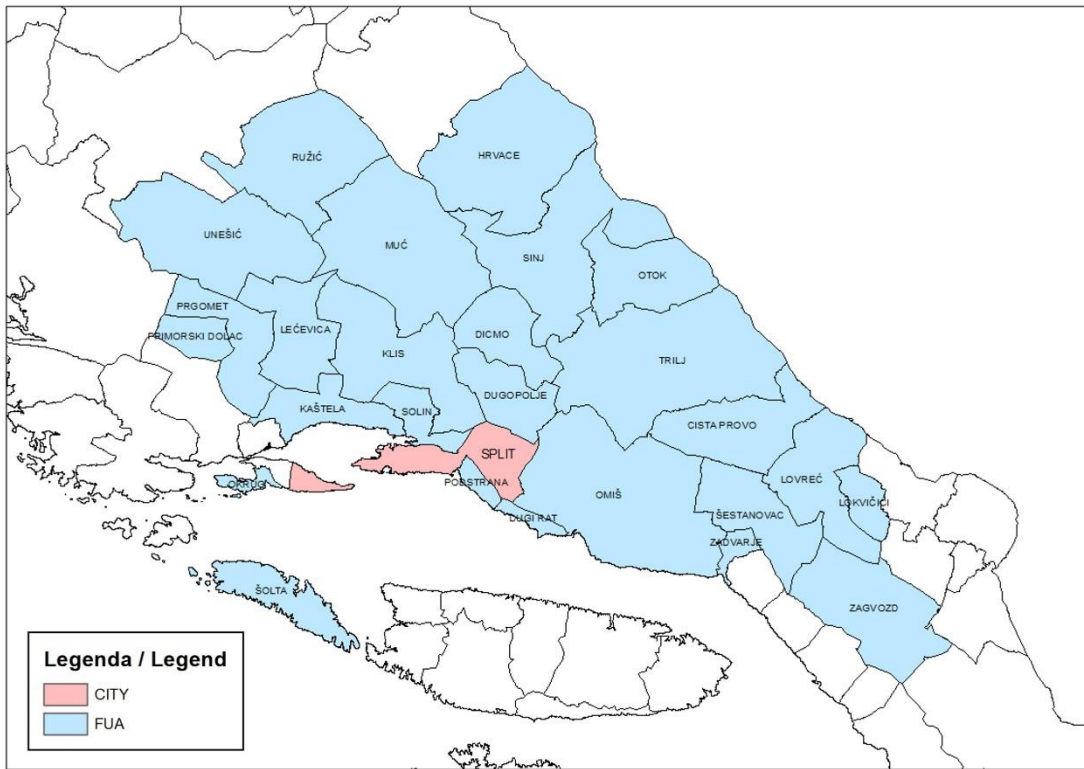


FIG. 3: FUNCTIONAL URBAN AREA (FUA) OF THE CITY OF RIJEKA

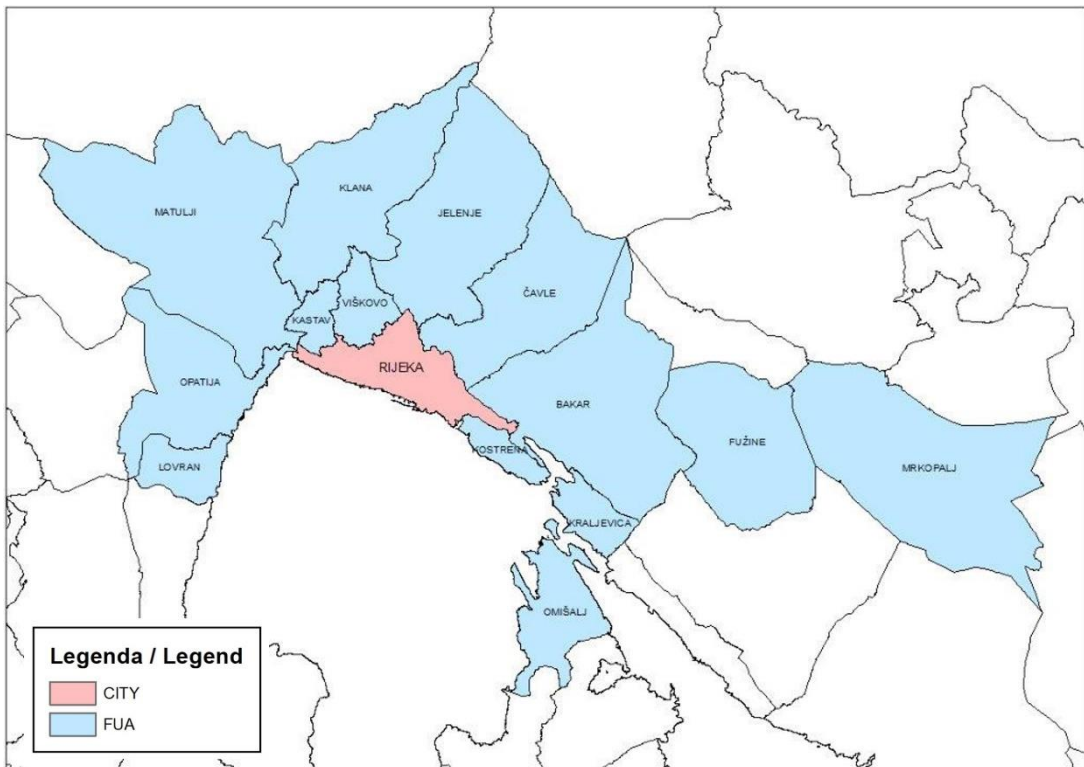


FIG. 4: FUNCTIONAL URBAN AREA (FUA) OF THE CITY OF OSIJEK

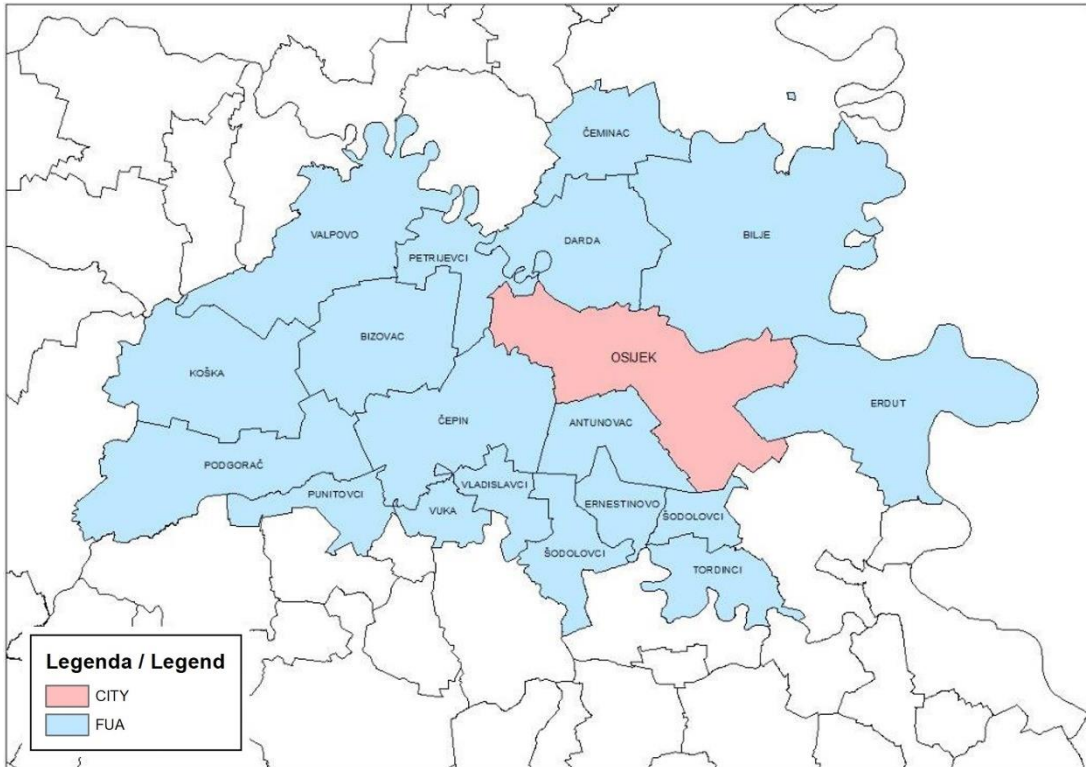


FIG. 5: FUNCTIONAL URBAN AREA (FUA) OF THE CITY OF ZADAR

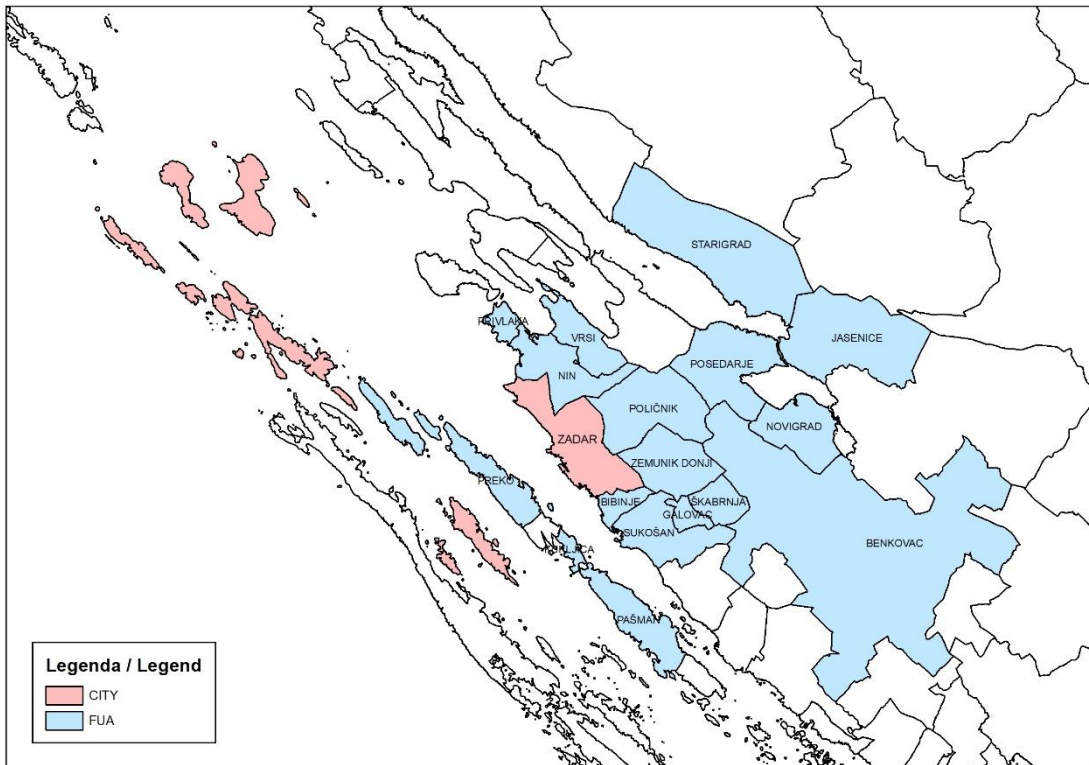


FIG. 6: FUNCTIONAL URBAN AREA (FUA) OF THE CITY OF SLAVONSKI BROD

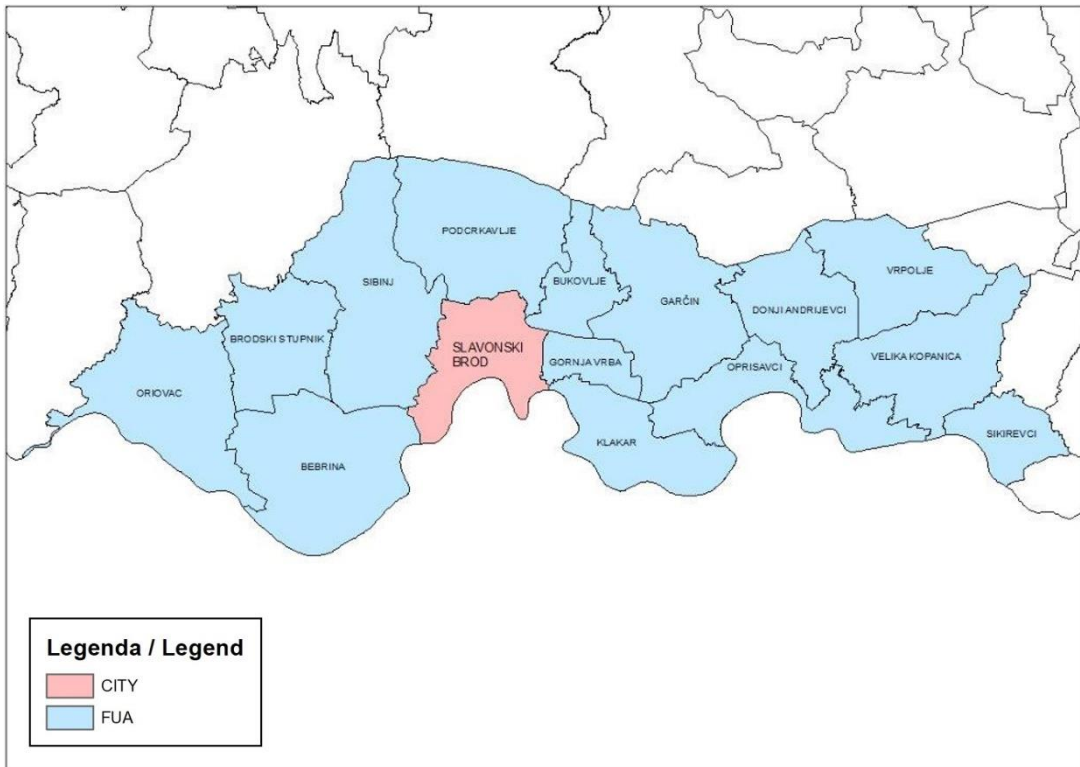
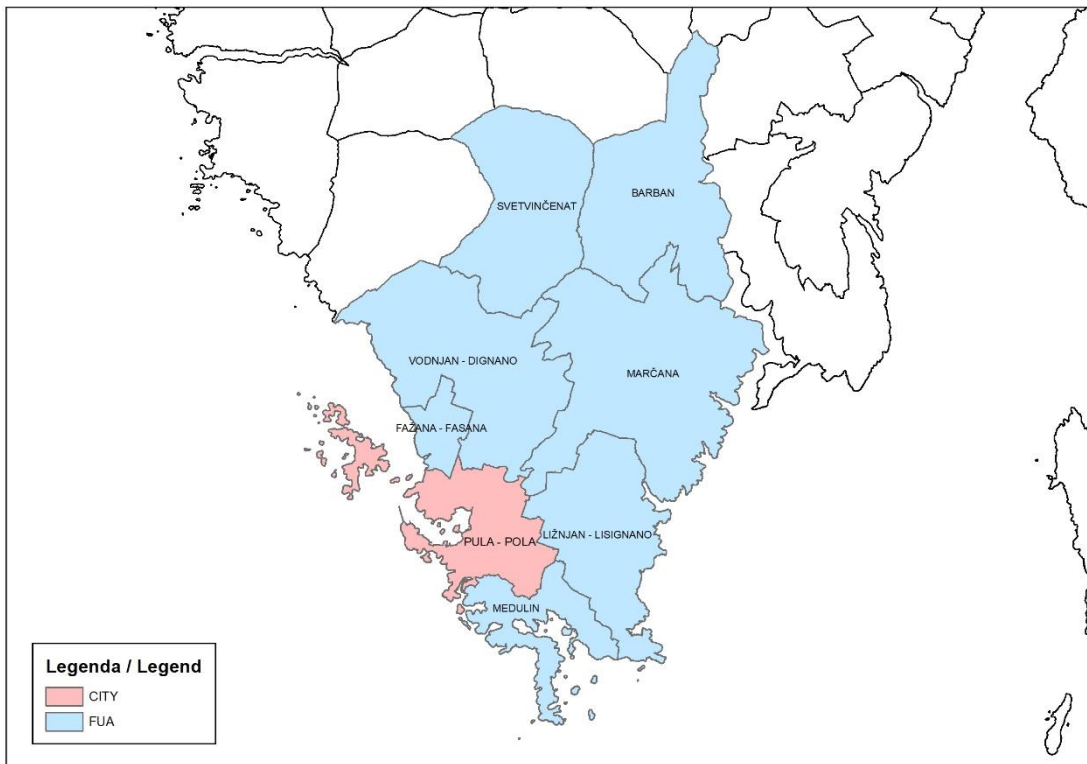


FIG. 7: FUNCTIONAL URBAN AREA (FUA) OF THE CITY OF PULA



## Sub-city district (SCD)

For the definition of sub-city districts, certain guidelines were adopted:

- Sub-city districts shall be defined for all capital cities and for non-capital cities with more than 250 000 inhabitants at the city level.
- The definition of sub-city districts for non-capital cities with less than 250 000 inhabitants at the city level is optional.
- Sub-city districts should have a population between 5 000 and 40 000.
- Sub-city districts shall be internally homogenous in terms of social structure and built environment as much as possible.
- In several large cities, a subdivision of cities already exists, but the units are larger than the above-mentioned thresholds in terms of the population. In that case, an additional sub-city district level can be defined, which corresponds to the established sub-city districts.
- Based on the above, sub-city districts can be defined at two levels. Sub-city district level 1 corresponds to the established sub-city districts and level 2 follows the population criterion.
- For most cities, only level 2 is defined, while for some other cities, both levels 1 and 2 are defined.
- If deemed necessary, it is possible to define a sub-city district without a territory (unknown sub-city district). This can be used for adjustments in calculating totals of all sub-city districts.
- The territory not covered by a city, but covered by a greater city can also be divided into sub-city districts. The same guidelines apply as above.

Below are cartographically presented sub-city districts of the cities of Zagreb, Split, Rijeka, Osijek, Zadar, Slavonski Brod and Pula.

FIG. 8: SUB-CITY DISTRICTS (SCD) OF THE CITY OF ZAGREB

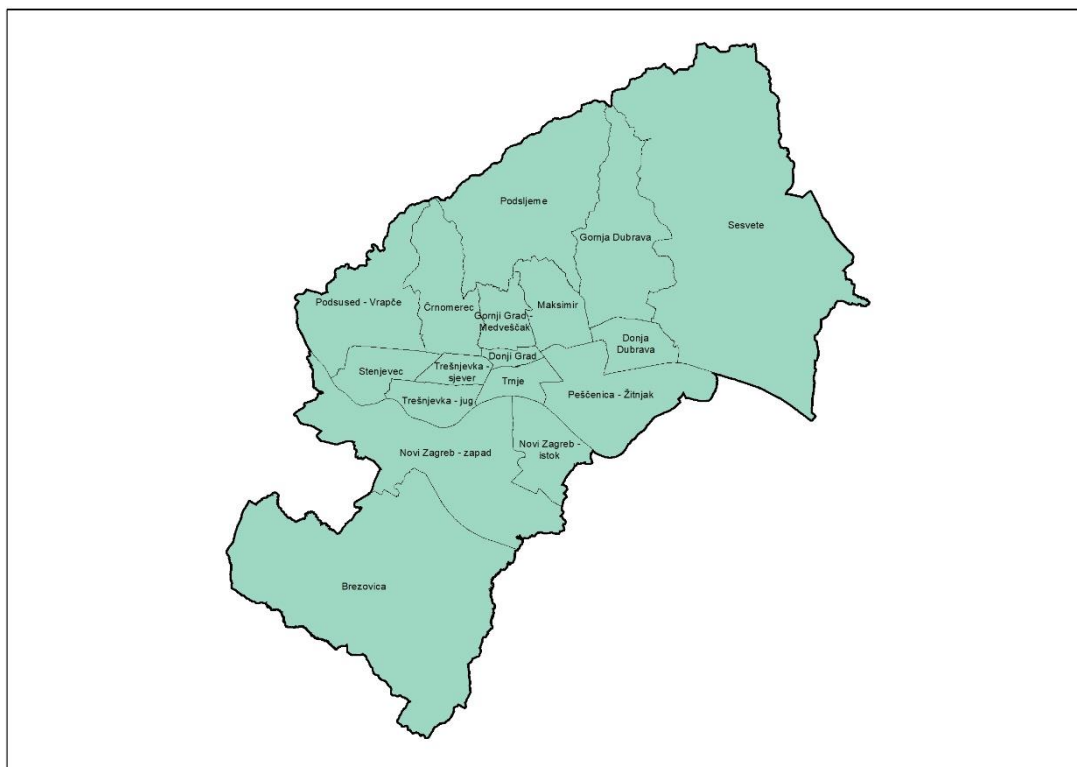


FIG. 9: SUB-CITY DISTRICTS (SCD) OF THE CITY OF SPLIT

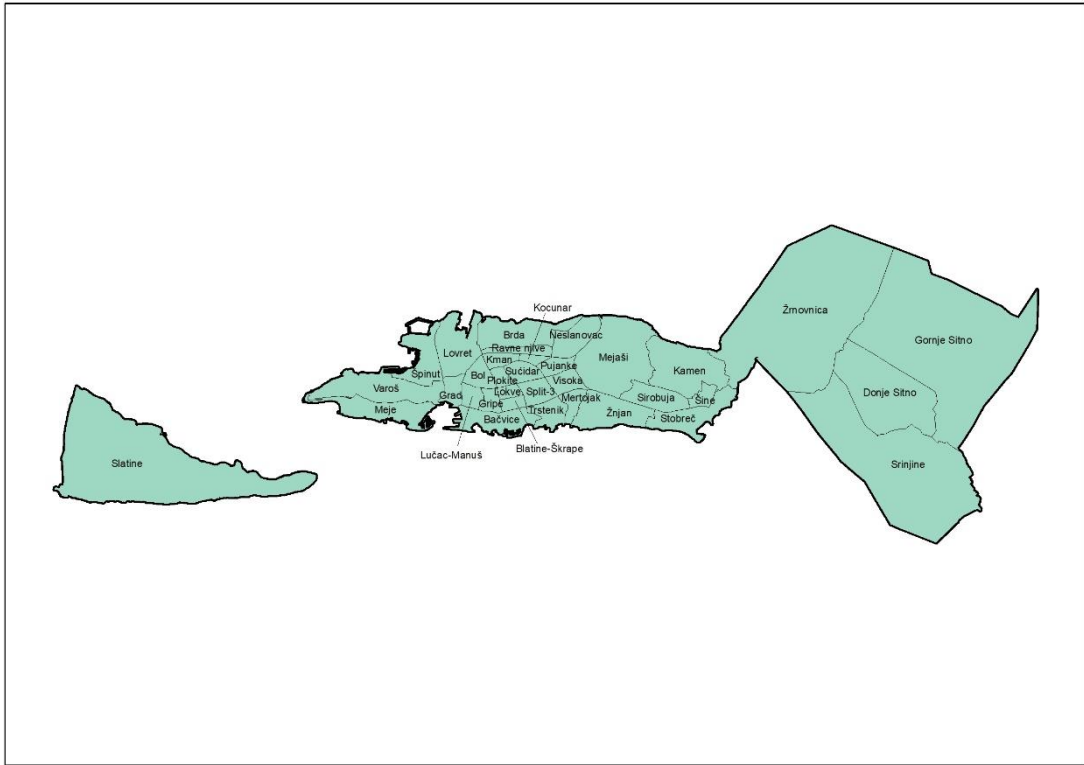


FIG. 10: SUB-CITY DISTRICTS (SCD) OF THE CITY OF RIJEKA

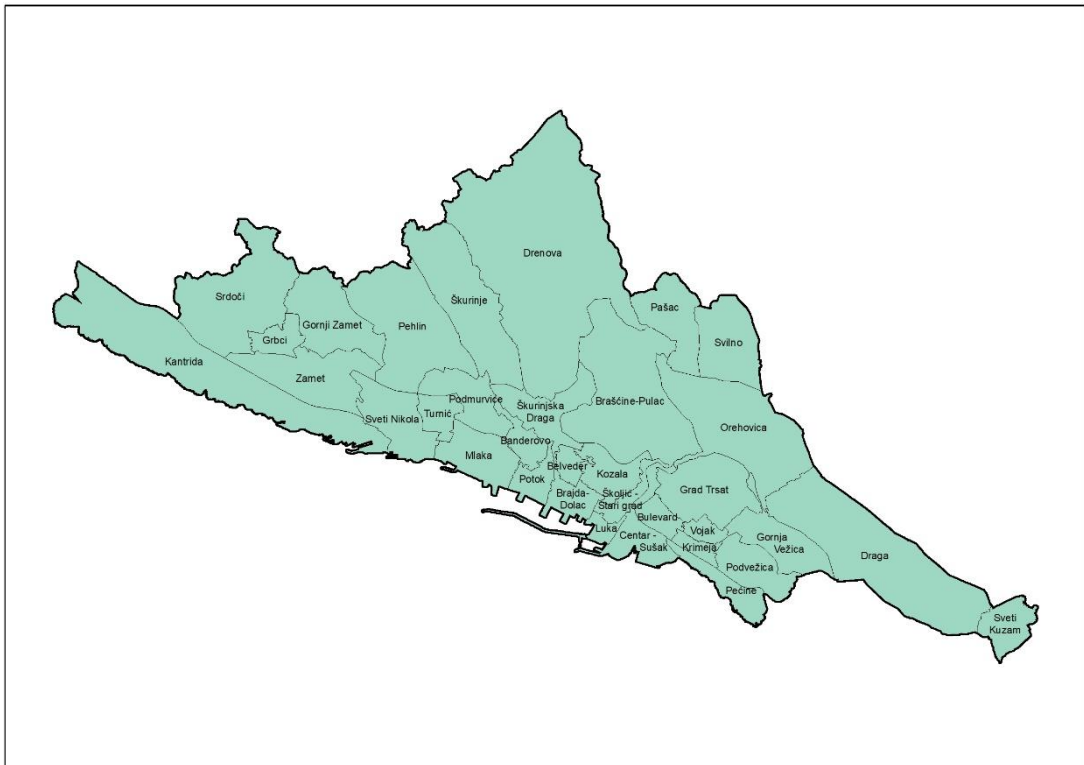




FIG. 11: SUB-CITY DISTRICTS (SCD) OF THE CITY OF OSIJEK

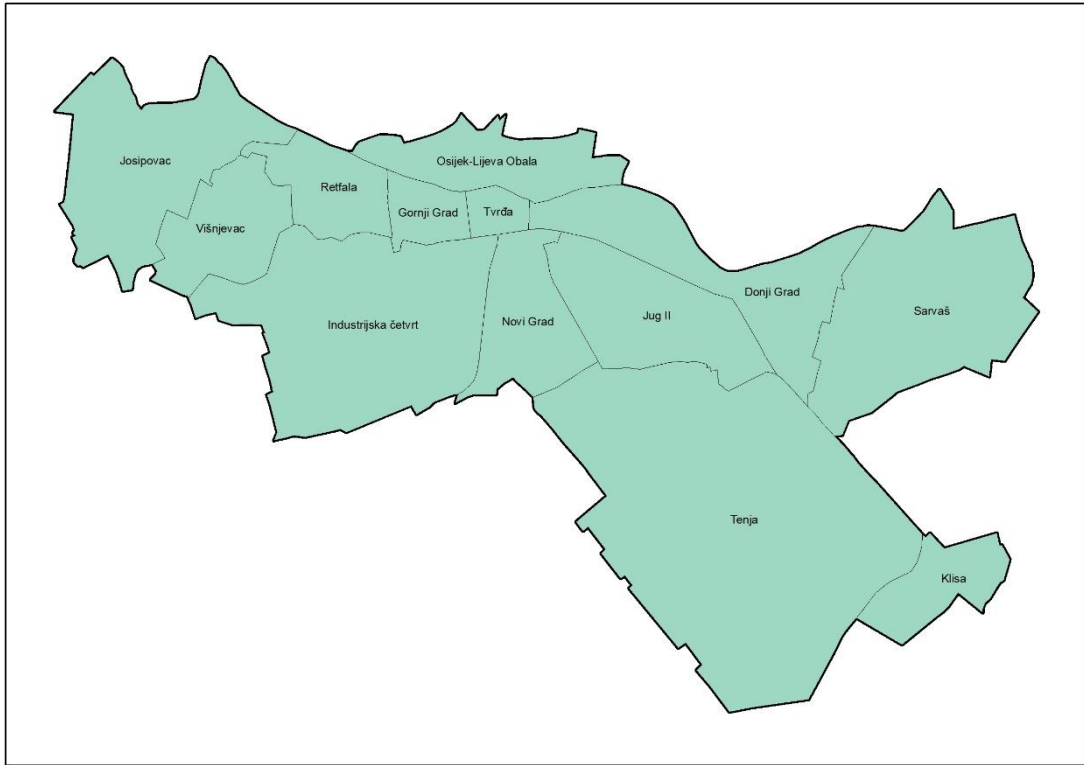


FIG. 12: SUB-CITY DISTRICTS (SCD) OF THE CITY OF ZADAR

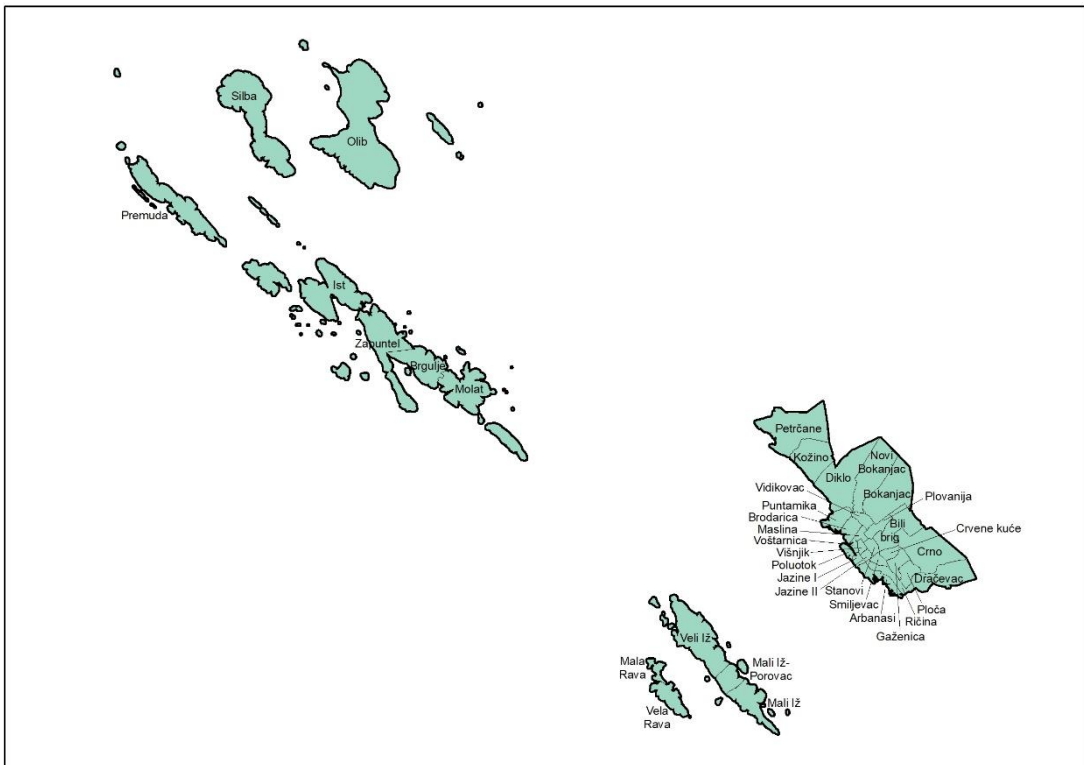


FIG. 13: SUB-CITY DISTRICTS (SCD) OF THE CITY OF SLAVONSKI BROD

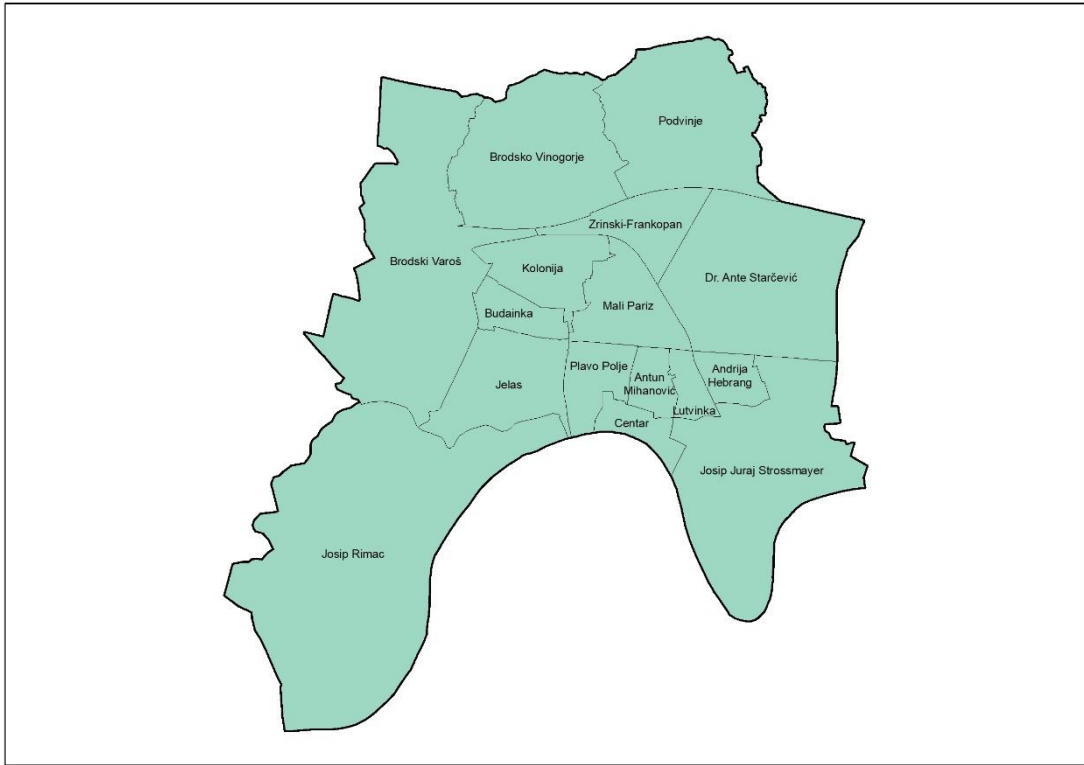
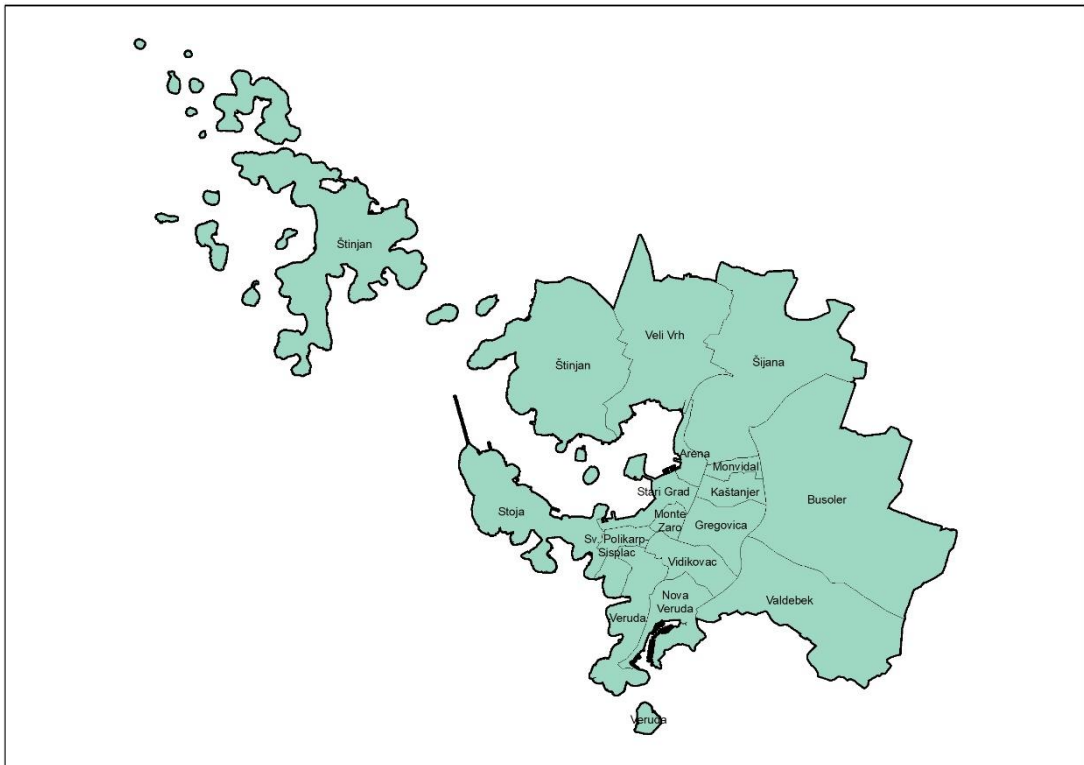


FIG. 14: SUB-CITY DISTRICTS (SCD) OF THE CITY OF PULA



- Statistical population

Population, households, enterprises, infrastructure, facilities, services

## **1. Relevance**

### **1.1. Data users**

Policy DGs of the European Commission

#### 1.1.1 User needs

User needs for statistics are expressed in evidence-based decision making. In the context of sustainable urban development, subnational statistics aim to provide assistance and support to citizens and policy makers in creating assessments as a prerequisite for any improvement, development and future monitoring.

#### 1.1.2 User satisfaction

Not applicable.

### **1.2. Completeness**

Compared to the Eurostat guidelines, the completeness of data is not fulfilled.

#### 1.2.1 Data completeness rate

Data completeness rate is 70%.

## **2. Accuracy and reliability**

### **2.1. Sampling error**

Not applicable.

#### 2.1.1 Sampling error indicators

The indicator for this survey is not applicable.

#### 2.1.2 Bias due to sample selection process

The indicator for this survey is not applicable.

### **2.2. Non-sampling error**

The calculation of the non-sampling error is not applicable.

#### 2.2.1 Coverage error

The coverage error is not applicable.

#### 2.2.2 Over-coverage rate

The indicator for this survey is not applicable.

#### 2.2.3 Measurement errors

The calculation of the measurement error is not applicable.

#### 2.2.4 Non-response errors

The non-response error is not applicable.

#### 2.2.5 Unit non-response rate

The indicator for this survey is not applicable.

#### 2.2.6 Item non-response-rate

The indicator for this survey is not applicable.

#### 2.2.7 Processing errors

The processing error is not applicable.

#### 2.2.8 Imputation rate

The indicator for this survey is not applicable.

#### 2.2.9 Editing rate

The indicator for this survey is not applicable.

#### 2.2.10 Hit rate

The indicator for this survey is not applicable.

#### 2.2.11 Model assumption error

The model assumption error is not applicable.

### **2.3. Data revision**

#### 2.3.1 Data revision – policy

The users of statistical data are informed about revisions (preliminary, final data) on website of the Croatian Bureau of Statistics.

#### 2.3.2 Data revision – practice

Preliminary results are not published in the survey; therefore, there are no data revisions.

#### 2.3.3 Data revision – average size

The indicator for this survey is not applicable.

#### **2.4. Seasonal adjustment**

Not applicable.

### **3. Timeliness and Punctuality**

#### **3.1. Timeliness**

##### **3.1.1 Time lag – first results**

The indicator for this survey is not applicable.

##### **3.1.2 Time lag – final results**

The indicator for this survey is not applicable.

#### **3.2. Punctuality**

##### **3.2.1 Punctuality – delivery and publication**

The indicator for this survey is not applicable.

### **4. Accessibility and clarity**

Not applicable.

#### **4.1. News release**

The data are published on the website of the Croatian Bureau of Statistics under the title Statistical Databases at [https://www.dzs.hr/Eng/system/stat\\_databases.htm](https://www.dzs.hr/Eng/system/stat_databases.htm).

#### **4.2. Other publications**

Eurostat website: <https://ec.europa.eu/eurostat/web/cities/publications>.

#### **4.3. On-line database**

PC-AXIS database

#### **4.4. Micro-data access**

The conditions under which certain users can access microdata are regulated by the Ordinance on the Conditions and Manner of Using Confidential Statistical Data for Scientific Purposes.

#### **4.5. Documentation on methodology**

The Methodological Manual on City Statistics is available at [https://ec.europa.eu/eurostat/documents/3859598/8012444/KS-GQ-17-006-EN\\_N.pdf/a3f1004f-cfae-4cc4-87da-81d588d67ae2](https://ec.europa.eu/eurostat/documents/3859598/8012444/KS-GQ-17-006-EN_N.pdf/a3f1004f-cfae-4cc4-87da-81d588d67ae2).

## **5. Comparability**

### **5.1. Asymmetry for mirror flows statistics**

Not applicable.

### **5.2. Comparability over time**

#### **5.2.1 Length of comparable time series**

Length of comparable time series is 7.

#### **5.2.2 Reasons for break in time series**

Not applicable.

## **6. Coherence**

### **6.1. Coherence – short-term and structural data**

The indicator for this survey is not applicable.

### **6.2. Coherence – national accounts**

The indicator for this survey is not applicable.

### **6.3. Coherence – administrative sources**

The indicator for this survey is not applicable.

## **7. Cost and burden**

### **7.1. Cost**

Not applicable.

### **7.2. Burden**

Not applicable.