Supplementary Material – B: City and Districts Data Collection

Initially, the collected database contained 2,421 observations representing the geographical coordinates (longitude and latitude) for Bucharest, extracted using the 15 Minute City platform. During the analysis, observations that extended beyond the administrative boundaries of Bucharest, including areas in Ilfov County, have been identified. In order to ensure the accuracy and relevance of the analysis in the urban context of Bucharest, the removal of the observations from Ilfov was considered.

Thus, for delimiting the districts of Bucharest and obtaining a more granular analysis of accessibility, OSM identifiers, specific to each district, were used. These OSM identifiers are unique for each district in Bucharest and are used to describe the geometric boundaries of each district within the OSM database. Specifically, the following OSM identifiers for each district have been used:

* District 1: R7960954;
* District 2: R7960953;
* District 3: R7960937;
* District 4: R7960957;
* District 5: R7960956;
* District 6: R7960955.

The above codifications helps in pinpointing and analyzing the points of interest within each district, ensuring a more precise analysis of accessibility within each district of Bucharest. More than this, by taking into account the *<<osmnx>>* and *<<geopandas>>* libraries, the generation of detailed maps was possible, reflecting the distribution and accessibility to facilities within each district.

After applying this filter, a total of 1,946 observations have been retained that specifically describe each district of Bucharest. The distribution of observations by district is as follows:

* District 1: 416 observations;
* District 2: 304 observations;
* District 3: 328 observations;
* District 4: 268 observations;
* District 5: 270 observations;
* District 6: 360 observations;

This cleaning step was essential to obtain an accurate representation of the accessibility and distribution of facilities within the boundaries of the city of Bucharest.

For data processing and visualization, the *<<osmnx>>* and <<*geopandas>>* libraries in Python have been used. These tools allowed to precisely extract and code the boundaries and points of interest for each district of Bucharest. Using *<<osmnx>>,* the specific encodings of each district from OpenStreetMap have been extracted, and with the help of *<<geopandas>>* the maps illustrating the accessibility of various facilities according to the defined variables have been drawn.