



## **Identification of senior citizens' residential needs in towns and cities with Voronoi diagram – Polish case study**

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In Poland, as well as in other European countries, societies are slowly undergoing an ageing process. The number of senior citizens has been increasing successively in the last dozen years. According to the forecast by the Central Statistical Office of Poland, by 2030 the number of citizens aged 65 and more will have exceeded 23% of the population. The trend will be accompanied by a number of logistical issues: where will those people reside? What kind of real estate will they choose? Will they opt for living with their families, in an old people's home, or will they rent their own apartments?

The aim of the article is to identify the needs of both senior citizens as well as of persons over 50 who will become senior citizens in the 13-15 years in the context of preparing the urban space for the changes occurring in the society. The aim is to be achieved in two stages.

The first stage consists of a survey conducted on a representative group of population (aged over 60) on the following: current residence, future residential preferences, architectural restraints, current trends (senior residential estates), and the choice of determinants of most relevance for senior citizens in this aspect.

The second stage consists of application of the Voronoi diagrams for the visualisation of the current state of urban area in respect of availability of selected public amenities essential for senior citizens. The purpose of this is to show the existing sites and lack of such in selected urban areas in the context of making investment decisions related to residential needs of the analysed population.

The issue should be of high importance for the local governments. Their role is to conduct sustained spatial policy, which is supposed to be based on the comprehensive picture of processes and phenomena constantly occurring in a town or city, so that urban space is planned in a way best serving the citizens, while taking into account their needs.

In conclusion, the aim of the research is to be used in diagnosis of the current state of the readiness of local governments for the changes in the structure of the society and in identification of the most convenient location of amenities essential for senior citizens.