

## Abstract

### A METHOD FOR THE IDENTIFICATION OF DEVELOPABLE LAND RESOURCES

Apart from actually developed areas, the land earmarked for development in local zoning plans has areas that can potentially be built up. It is impossible from the legal and logical perspective to build up 100% of an area earmarked for development in local zoning plans. It is a result of legal restrictions regarding the position of new buildings in relation to boundaries of cadastral plots or boundaries of land real estate, existing buildings, or public roads. Despite regulatory obligations of local governments to make accounts of land intended to be built up, there is no structured method for identifying actual developable land resources.

Hence, the dissertation proposes an original method for the identification of developable land resources, taking into consideration legal restrictions regarding building position. To achieve this, universal and comprehensive GIS algorithms based on spatial data and sophisticated geoprocessing tools were developed. Moreover, the housing capacity determining the population size that can live in the area was estimated for selected developable land sections intended for housing. The method was verified with five municipalities in the Krakowski District and one municipality in the Olkuski District. It identified 50% of the existing developable land resources as suitable for further development. The number of people who could potentially live in these areas exceeded the current number of residents of the municipalities more than twice.

The conclusion is that the method can assist in the process of local spatial planning as regards accounts of land intended to be developed. Its universal character makes it applicable to any area of developable land.

Keywords: developable land, position of building on plot, housing capacity, geographical information systems

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