

THE CALCULATION OF THE RANGES OF THE SPECIFIC RATE OF CADASTRAL COST TO BUILD 3D MAPS OF ESTIMATED ZONING (ON THE EXAMPLE OF TYUMEN CITY)

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The article proposes a method of constructing an interval variation series with equal intervals as a mathematical tool for calculating the step of changes in the UPCS for the maps of estimated zoning. It describes the sequence of calculations, which includes 3 stages: the formation of the interval variation series, the calculation of the distribution center indicators, and the calculation of the relative variation indicators of the interval variation series. The resulting interval variation series allowed us to group the totality of the state cadastral assessment data and present them in the form of homogeneous intervals necessary for performing the estimated zoning. To visualize the results, it is proposed to use a three-dimensional geoinformation model in the form of a 3D prism map, which allows you to visually display changes in the value of the UPC. The presented methodology was tested during the evaluation zoning of the territory of the city of Tyumen using the results of the state cadastral assessment. The created assessment zoning map can be used for cadastral valuation of newly formed real estate objects, for information support of the territorial planning system, as well as for analytical support of investment programs and projects for the development of land and property complexes. Assessment zoning maps made with the use of modern geoinformation technologies in the form of three-dimensional digital models can be one of the elements of an intelligent model of an urban area, which will allow not only to carry out operational management, but also to develop effective mechanisms that optimize the trajectory of spatial development of a locality.

Keywords: state cadastral valuation, estimated zoning, specific indicator of cadastral value, coefficient of variation, interval variation series, geoinformation system, prism map, 3D model

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