

## ABSTRACT

This diploma work is carried out to obtain educational - qualification of "Bachelor" and devoted to projecting the spatial distribution of population for small areas.

The aim is to create mathematical and software tools for spatial projections on a sub-regional level.

The analysis of existing methods of demographic spatial projections and analysis of positive and negative aspects were made. Based on its positive aspects cohort-component method was selected to perform the task. Rogers demographic model was selected as basis for developed model.

New projection model was designed. Software implementation of the method was developed and tested. Testing shown that developed model has 7,8%.

The work consists of 39 pages, contains references to the 9 sources, 4 figures, 4 tables and 2 supplementals.

Keywords: projection, small areas, population, demography, fertility, mortality, migration.