

## **Abstract**

The thesis deals with the functional areas delineation problem, seeking the best way to delimit functional regions based on spatial interactions (flows) using geographic information systems. The basic approaches from Czech and international literature are described. This thesis aims to show both their complicatedness and incompleteness, mainly concerning their spatial aspects, and to find a simplification by GIS implementation. A new method for delimiting functional regions is provided, based on the approach by M. Hampl. This method is implemented together with other auxiliary tools in the ArcPy environment as a toolbox for ArcGIS 10. The results of the method and its implementation are critically evaluated.