

Abstract

An object of this diploma thesis is a study of daily rhythms of municipalities in the Central Bohemian Region. The aim is to bring new insights into the daily rhythms of the suburban zone of the Prague Metropolitan Area and the Central Bohemian Region. The work has three main objectives. The first objective is to create a typology of the Central Bohemian municipalities according to their daily rhythms. Mobile phone location data is used to create the typology. There was used a method called cluster analysis. The second objective is to evaluate the daily rhythms in selected municipalities (Kněževes, Ořech, Tochovice) in detail with other data (mobile phone location data from Prague Institute of Planning and Development and commuting data from the Census 2011). Using these sources, I want to highlight the obstacles, but also the benefits of using mobile phone location data in studying of daily rhythms. The last objective is to describe in these three municipalities the pacemakers which influent their timing.

The results show that in the Central Bohemian region dominate municipalities with a residential type of daily rhythm. Most of these municipalities are located in the suburban zone of Prague, while in other municipalities of the Central Bohemian region is the rhythm often almost balanced. Large cities have typically a working type of daily rhythm, with the exception of cities that have grown significantly in the past 20 years. Case studies have shown that mobile phone location data are a good source for studying daily rhythms, but they must be critically evaluated. It is advisable to verify the resulting rhythm of the municipality with other sources. From these data, it is possible to detect only very strong pacemakers that work for a long time (within hours).

key words: daily rhythm, pacemakers, mobile phone location data, Central Bohemian region, suburban municipalities