

**Ján BUČEK, Branislav BLEHA**

**URBAN SHRINKAGE AS A CHALLENGE TO LOCAL DEVELOPMENT PLANNING IN SLOVAKIA**

The demographic characteristics of "shrinking" processes in large Slovak cities, as well as the awareness of such shrinkage processes in local development planning, is the subject of this article. Population loss, together with other demographic indicators, clearly documents such a trajectory in urban development. In spite of this reality, there is only limited reflection of the "shrinking" in planning documents of cities approved by town councils. Some reasons for this decreased sensitivity to the complex problem of shrinking cities include missing relevant information (e.g. demographic prognoses), the milder forms of "shrinking" in Slovakia, the absence of political acceptance of the process by local elites, and the dominant-growth oriented planning practices.

**Konštantín ROSINA, Pavol HURBÁNEK**

**INTERNET AVAILABILITY AS AN INDICATOR OF PERIPHERALITY IN SLOVAKIA**

A method employing different data sources in the construction of indices that qualify internet availability is developed in this article. The indices are subsequently correlated with other indicators commonly used to delineate peripheral areas, in order to evaluate factors which might influence (or be influenced by) the spatial distribution of internet availability. The results show that the information-communication technology side of spatial polarization generates similar patterns as the other more traditional aspects.

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**A MODEL FOR THE IDENTIFICATION OF AREAS FAVOURABLE FOR THE DEVELOPMENT OF TOURISM: A CASE STUDY OF THE ŠUMAVA MTS. AND SOUTH BOHEMIA TOURIST REGIONS (CZECH REPUBLIC)**

A basis for the identification of potential tourist development areas was defined as a combined use of the model of area load by visitors, the territorially-located database of tourist attractions, and the perception of their attractiveness by visitors. A distinctive inequality was identified in the area load and the distribution of tourist attractions. The areas of development were determined on the basis of a difference between the relative attendance and the relative attractiveness of the partial territorial units of a regular hexagonal network, sized approximately 3 km<sup>2</sup>, with a concurrent requirement of above-average total attractiveness.

**Zdeněk OPRŠAL, Bořivoj ŠARAPATKA, Petr KLADIVO**

**LAND-USE CHANGES AND THEIR RELATIONSHIPS TO SELECTED LANDSCAPE PARAMETERS IN THREE CADASTRAL AREAS IN MORAVIA (CZECH REPUBLIC)**

The analysis of changes in landscape use and the related significance of some natural factors is examined in this paper, using three municipal cadastral areas in Moravia, Czech Republic. The relationships between changes in the use of the rural landscape and natural conditions were analyzed with the use of GIS tools and methods of canonical correspondence analysis (CCA). The CCA results showed a correlation between the selected natural factors and landscape changes, with the most significant factors being those of slope and altitude. The CCA models exhibited varying reliability in accounting for the extent of landscape changes related to topographical diversity of the territories. Natural conditions were more influential in periods with lower change dynamics and at the same time in areas with higher topographic heterogeneity. Although the results of the statistical analyses confirmed the significance of natural factors, only a part of land use changes could be explained by their influence. Socio-economic factors are apparently the main forces affecting landscape character and change.

**Radek ROUB, Tomáš HEJDUK, Pavel NOVÁK**

**OPTIMIZATION OF FLOOD PROTECTION BY SEMI-NATURAL MEANS AND RETENTION IN THE CATCHMENT AREA: A CASE STUDY OF LITAVKA RIVER (CZECH REPUBLIC)**

Of all natural disasters, floods represent the most serious threat to the territory of the Czech Republic. This is given by the situation of the Czech Republic at the continental as well as the worldwide scale. At present, the design of anti-flood measures is mostly based on technical measures, without considering improvements in the hydromorphological status according to the Framework Directive on Water Management and without considering the natural transformation of flood discharge in the alluvial plains of water courses. This report presents a design for the optimization of anti-flood measures in the pilot catchment of the Litavka River, in which we propose particular measures for the catchment for its entire surface while providing a good hydromorphological status. We also wanted to quantify the proposed measures leading to the increased retention and accumulation capacities of the catchment area.