GIS Support for Managerial Decision-Making in Enhancing Cycling Tourism Routes

Bc. Romana Vaščáková; Bc. Branislav Blažek
University of Žilina
Faculty of Management Science and Informatics
Univerzitná 8215/1, 010 26 Žilina, Slovakia
vascakova1@stud.uniza.sk
blazek10@stud.uniza.sk

Abstract. *The aim of this research is to support managerial decision-making in the development and enhancement of cycling tourism routes using geographic information systems (GIS). The research focuses mainly on the Váh Cycle Route in Slovakia, which passes through the Žilina, Trenčín, Trnava and Nitra Self-Governing Regions. Cycling tourism is analysed as an important part of sustainable mobility, regional development and tourism. The study also focuses on the use of spatial data, multi-criteria decision-making methods and Strava Metro data. These data are used to analyse the movement patterns of cyclists and to evaluate the use of existing cycling routes. By importing Strava Metro data into a GIS environment and combining them with other spatial datasets, it is possible to identify heavily used cycling corridors, assess the current state of infrastructure and support evidence-based planning. The research creates a basis for further cost-benefit analysis and for the development of a methodology that can help regional and local authorities make strategic decisions in cycling tourism.*

Keywords. cycling tourism, geographic information systems, sustainable mobility, managerial decision-making, Váh Cycle Route

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