Abstract

Nowadays, due to rapid growth of urban population, intra-city travel has become a major part of people's daily activities, whether to carry cargoes or to transfer passengers. Some of such displacement is performed by personal vehicles, a significant number is done using public transportation means, and in cases, it is even done partly with a bicycle ride. Interestingly, besides various advantages of the urban transportation system, its unplanned development and programming can mostly lead to disadvantages such as urban damage, environmental pollution, and increased traffic volumes, waste of citizens' time, land warming and excessive consumption of fossil fuels. Therefore, in the present study, it was attempted to investigate the condition of current means of transportation active in the city of Zabol and to rank them in accordance with the human and natural geographical features of the city. Thus, to rank the various means of transport according to their different characteristics and disadvantages, the TOPSIS model is used for the pathology of the urban intermodal transport system using the ELECTERE model. The comparative study of Zabol's most important means of transportation, namely personal transport, public transport, bicycles, and motorcycles which was done according to the eight criteria of the measure, ranging from weather and climate conditions of the area to affordability and health, indicated that in comparison with other types of transportation of the city, bike riding has the most optimal characteristics and advantages: having no environmental pollution, creating justice in access to urban facilities, promoting individual and social health and well-being, provoking mobility in urban spaces, and building social interaction. Accordingly, it was selected as the safest, most economical, and most dynamic method of transportation in the city of Zabol.

Keywords: Urban Transportation, Zabol, TOPSIS, ELECTERE, Bicycle



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Pathology travel in the transportation system within the city of Zabol

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