The impact of strategic policies changes on urban mobility improvement: the case study of Tehran

The Iranian capital, Tehran, has a complex urban mobility system, which needs to improve in a sustainable perspective to address the challenges posed by the increasing traffic congestion and pollution. The city’s road network has developed much faster than public-transport infrastructure and non-motorized modes. Consequently, the city’s urban mobility system is car-oriented. Hence, Tehran’s urban mobility management policy is facing a drastic increase in private vehicles use, which is affecting the central area and resulting in a permanent congestion on this area of the city. Taking into account the upcoming challenges and problems regarding urban mobility improvement, this study analyses the impact of changes in the usual strategic policies to improve urban mobility in central area of Tehran. Some innovative approaches and strategies were subject to a multi-criteria evaluation. The research focus on: A) a new, human-centred, urban-mobility policy approach based on the human characteristics of transport demand and its needs in urban mobility. B) the presentation of a model-based methodology for assessing the improvement of the urban mobility. C) an innovative method is proposed for data gathering and household travel survey. D) the definition of a set of quantitative criteria to measure urban-mobility characteristics and improvements towards a more sustainable mobility. E) the development of an analytic-network-process model for selecting the best alternative policy, based on quantitative criteria and unique interactions and feedback between the elements that characterise them.

Key Characteristics
Urban mobility system • Mobility management