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Managing an urban transport system in enhancing the area stability

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Abstract

© Copyright 2016 by SCITEPRESS - Science and Technology Publications, Lda. All rights reserved.The urbanized mankind is faced with vulnerability of urban systems, migration and concentration of population, low quality of habitat, loss of fertile land, and necessity of waste disposal. In large cities, a significant contribution to atmospheric pollution with sulphur dioxide, nitrogen and carbon oxides, and industrial dust comes from the motor transport. The motor traffic growth inevitably affects the human health by causing road and transport traumatism, respiratory diseases and diseases caused by physical inactivity. The proposed solution is based on optimization of a city transport system parameters. This was achieved by via simulation modelling taking into account a large number of parameters, both within and outside the system, many of the latter being stochastic. The recommendations include rearranging of the public transport routes and changing over to vehicles running on gas motor fuel.

Keywords

Air, Intensity, Maximum allowable concentration, Motorway, Road transport