

БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ

**ГЕОГРАФИЧЕСКИЕ НАУКИ  
В ОБЕСПЕЧЕНИИ СТРАТЕГИИ УСТОЙЧИВОГО РАЗВИТИЯ  
В УСЛОВИЯХ ГЛОБАЛИЗАЦИИ**

(к 100-летию со дня рождения  
профессора Н. Т. Романовского)

**GEOGRAPHICAL SCIENCES  
IN REALIZATION OF SUSTAINABLE DEVELOPMENT STRATEGY  
IN GLOBALIZING WORLD**

(to the 100th anniversary  
of Professor N. T. Romanovskij)

Материалы  
Международной научно-практической конференции  
25—28 октября 2012 г., Минск, Беларусь

Минск  
Издательский центр БГУ  
2012

УДК 33:911.3(100)(06)

ББК 65.049я431

Г35

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**Географические науки в обеспечении стратегии устойчивого**  
Г35 **развития в условиях глобализации (к 100-летию со дня рождения**  
**профессора Н. Т. Романовского) = Geographical sciences in realiza-**  
**tion of sustainable development strategy in globalizing world (to the**  
**100th anniversary of Professor N. T. Romanovskij) : материалы Меж-**  
**дунар. науч.-практ. конф., 25—28 окт. 2012 г., Минск, Беларусь /**  
**редкол. : И. И. Пирожник (гл. ред.) [и др.]. — Минск : Изд. центр**  
**БГУ, 2012. — 362 с.**

ISBN 978-985-553-057-3.

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УДК 33:911.3(100)(06)

ББК 65.049я431

ISBN 978-985-553-057-3

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**UNSUSTAINABLE PUBLIC ROAD TRANSPORTATION****Szalkai G.***Eötvös Loránd University, Budapest, Hungary*

Transport is a fundamental and increasing sector of the economy; in the developed countries, the transport-related industrial branches and services give employment to 20% of the labour force. Every job in the car manufacturing industry creates another three in the services; therefore the maintenance of the current traffic levels is a (short term) economic interest. Their artificial restriction would lead to massive unemployment and to a significant decrease in transport-related R&D activities (Michelberger, 2008).

The great implication of transport is undeniable to regional development (Schürmann et al, 1997), as well as to the maintenance of international (cultural) relations, to international knowledge transfer, but also to military strategy; yet, its most significant impact had been on the emergence of a new system of territorial division of labour and on the changing relation of space and time due to a substantial increase in distance, speed and freight involved in transport (Dusek–Szalkai, 2008).

However, there have been growing environmental concerns related to transport, over the increase in transport capacity and the unfavourable change in the modal split. The more than 6 billion inhabitants of Earth use 900 million cars, while the total number of motor vehicles is over 1 billion. The number of the vehicles is growing by 30-40 million annually, 20% of which belongs to the developing countries; but it is estimated that due to the fast development expected in South America, China, India and Indonesia, by 2020, half of the new vehicles will be sold in the countries known today as the developing world. What is more, the efficiency of the vehicles equipped with internal combustion engines is extremely low, only a maximum of 10% of the energy value of crude oil serves to drive the vehicles, 90% goes for its mining, its conversion into fuel and for other necessary operations of the vehicle.

The stock of motor vehicles is the greatest pollutant on our planet; its atmospheric, noise and vibration pollution is detrimental to the health of humans as well as to the whole biosphere and the built environment. Besides, traffic has a more direct impact on health via accidents; 1.2 million people died and 50 million got injured on public roads in 2006 (Michelberger, 2008).

A fundamental way to alleviate the problems related to transport would be by decreasing the demand for transport, which however, is inconsistent with the short-term interests of both economy and society. This is for the reason that the segmented economic structure and the spread of modern transport management procedures are all inclined to increase traffic, and besides, public road traffic has an increasingly dominant share in the ways people move around as the territorial shortcomings of the service system are more and more compensated by transport (Fleischer, 2004).

All in all, the opportunities offered by modern transportation technologies and the social-economic significance of the sector are indisputable, nevertheless, one should be aware of the adverse impacts of traffic, too. However numerous are the economic advantages and welfare functions that derive from transport, there has to be a limit put on the growth of traffic for environmental and health related reasons. The real solution has to be sought outside the sector, in the social-economic reasons of traffic generation.

To be able to take a full advantage of the opportunities offered by transport, as well as to treat the problems it causes, one should have accurate information of the related processes. One of the most essential, yet in economic and social analyses, a relatively rarely studied segment of this issue is the volume of public road traffic.

In my analysis, I carried out a study of public road processes in Hungary starting from 1985, on the microregional scale. The innovative contribution of this research is that it is the first attempt to make road network data related to traffic corridors examinable as a spatial indicator over such a long period of time.

It can be established that mostly, public road traffic is dependant on different factors by different vehicle categories. While the income tax and number of motor vehicles – indicating social welfare – are in a closer relationship with the number of passenger cars, the GDP per capita – indicating economic performance – “influences” more the traffic of freight vehicles. These results suggest that economic development is more suitably described by smaller scale freight vehicle traffic which follows the rational decisions of the economy better, than by total traffic or passenger car traffic, because the transport of persons depends on several social, meteorological, psychological factors, too, which cannot be easily analysed quantitatively.

From the perspective of the entire society, the final conclusion is that although, based on the above, the size of traffic can be in itself regarded a “development indicator”, a more polluted environment caused by public road traffic is also a part of the assessment of prosperity, which on the long run will mean so big a contradiction that it may endanger the current social system.

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