

18. Impacts of Transport and Influencing Factors

I. Impacts of transport

Air pollution

Transportation became the 3rd most polluting segment after the energy and metallurgy. It has a huge influence on the environment and also on people. Towns and cities, simply urban areas, refer to the most polluted regions due to the high concentration of motor vehicles in the small areas. They release fumes (gases) like CO, CO₂, SO_x, NO_x, Pb and other and what is the worst – people breathe it. The road transport represents the most significant source of environmental damage (91-96% of all transport types). Water transport harms the nature as well since it has transported crude oil over long distances. Sometimes (1989 – shores of Alaska) they crash and a catastrophe emerges.

Noise

It also negatively influences people's lives and the health is threatened. Noise is produced by many sources and it is not natural to humans. Therefore it results in various negative effects like stress, tension among people, tiredness, etc.

Why is not a rail transport the major polluter?

Which substances remain on water surface after hundreds of ships passing by, e.g. on the Danube river?

What else can be negatively influenced by transport?

How would you personally solve the problem concerning the environmental pollution?

What type of fuel is the most harmful for the nature? Do you know any alternative fuels?

Locate the heaviest transport nodes/crossroads on the map of Slovakia and give 2 solutions for the traffic congestions.

Do you use a public transport? Give 2 advantages of it.

Figure 1: The total consumption of fuels in transport in Slovakia.

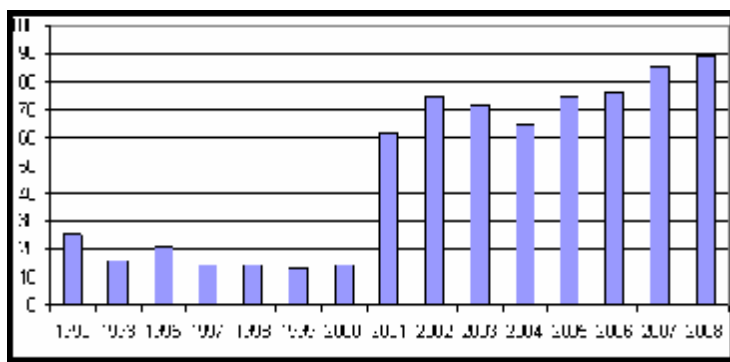
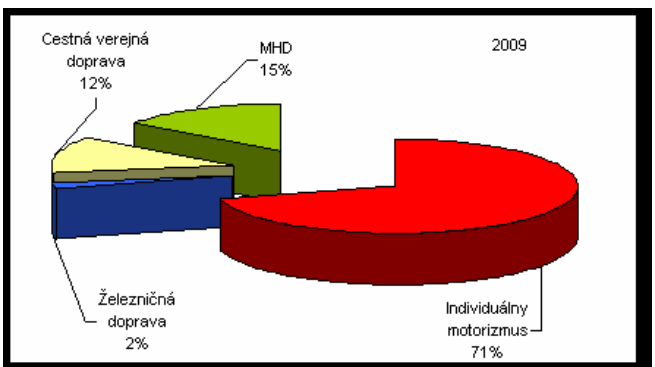


Figure 2: The share of used transport means according to the number of transported passengers



II. Transport-influencing factors

The distribution of transport is unequal and that has been the result of industrial character, outer industrial relations, settlement characteristics and location.

Work in pairs. Think of 3 factors which influence transport. Describe their significance and relation with the 2 selected transport types.

The transportation in Slovakia depends mostly on the:

- Level of industry = whether it deals with light manufacturing or heavy-industrial sectors
The pattern:
- Settlements = their distribution, size, functions and significance
The pattern:
- Location and relief = terrain, topography, altitudinal changes, valleys, etc.
The pattern:
- Government = costs for construction of 1km of a motorway, subsidies, incentives, policy including border checkpoint, international agreements about transfers, etc.

Keywords:

pollution, environment, emission, smog, noise, health, commuting, car, fossil fuel, hybrid energy, gas, industrial sector, topography, financial subsidy/incentive, transfer, border checkpoint, harmful, significance, economic (efficiency), traffic congestion