

One response to the political transformation and consequent changes in Polish retail **was the advent of shopping centres which became more and more popular on the domestic market, concentrating commercial activity.** Due to the big concentration of retail outlets these new facilities **began to play an increasingly important role in shaping a network of different types of relations and connections integrating many social and economic phenomena which take place in the city.** In the conditions of growing competition these facilities continued to extend their offer to include other service activities different from retail. As a result, their impact kept growing, which depended not only on the scale of retail concentration but also on other attractions offered by them. **It is clear to see the impact of these places on, for instance, traffic in the city, which consequently translates into the efficiency of functioning of the city's transport system.** The Polish legislation does not regulate the issues connected with the necessity of carrying out transport analyses (Transport Impact Assessment) for facilities of this type. This is why there are no practical examples which could illustrate the aforementioned phenomenon. Polish scientific literature in this field is also rather scarce, which is why it is worth showing the feedback between these facilities, which can be really large, and the transport system.

The submitted application is aimed at showing the impact of shopping centres on the city transport system and the significance of the city transport system in the functioning of shopping centres.

The research concerning these phenomena will be conducted both on the basis of methods established in the scientific literature and innovative ways of understanding the phenomena of daily movement of city dwellers. The methods which are commonly used in social sciences and will be applied in the project include analyses connected with **accessibility and statistical models showing the relationship between different phenomena.** To be more precise, as exemplified by the project, statistical and spatial analyses allow to understand how the number of vehicles reaching shopping centres change in relation to, for instance, their type, offer and attractiveness. Innovative methods in the opinion of the author comprise, in turn, **the method and tool which allows to predict spatial differentiation of traffic volume in often complex transport systems.** The research will also make use of data which in social sciences have not been sufficiently used so far. These include, for instance, information gathered by intelligent transportation systems.

The result of the work will be a **model of traffic-generating potential of shopping centres. It will allow to describe the volume of car traffic caused by these facilities on the basis of basic characteristics of shopping centres and areas where they are situated.**