

**SUSTAINABLE TRANSPORT DEVELOPMENT IN LITHUANIA: AIR
POLLUTION AND NOISE REDUCTION IN CITIES, CONSTRUCTION OF
BYPASS, IMPLEMENTATION OF SUSTAINABLE INNOVATIONS**

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ABSTRACT

Noise generated by transport and air pollution has a significant direct impact on human health as well as quality of residential and recreational environment. The paper focuses on noise modelling program CADNA and air pollution modelling software ISC - AERMOD-View with regard to previous studies of relation between noise and air pollution and traffic along with its individual characteristics where impact of transport on the environment quality in the capital of Lithuania - Vilnius in terms of infrastructure development is evaluated. For that purpose, a less busy 2.7-kilometre-long street is selected where the traffic after the reconstruction by widening it would increase several times and the street would become one of the city's most important transport corridors and outside bypass of the city. The paper aims at assessing the direct relation between noise and air pollution and traffic density and mitigation measures without which today's urban development is hardly possible in terms of sustainable and conducive human habitation.

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