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## Abstract

### Purpose

The purpose of this paper is to identify and categorize the social and environmental impacts of transportation systems, and address the appropriate solutions to mitigate and manage these impacts in order to achieve sustainability.

### Design/methodology/approach

This research performs a comprehensive literature review to suggest a framework on socio-environmental impacts of transportation and related solutions. The proposed framework is analyzed through quantitative methods and a survey study in freight transport.

### Findings

Findings support the direct relation of potential solutions and socio-environmental impacts of transportation. All four categories of solutions (technological, socio-economic and political, cultural and behavioral, and infrastructure related) reveal direct impact on reduction of environmental impacts. However only technological solutions were found to be influential on social impacts of the transportation.

### Originality/value

To the best of the authors' knowledge there has not been any comprehensive framework covering social and environmental impacts of transportation in the literature. In addition, this paper categorizes potential solutions to enhance socio-environmental performance of the transportation and investigates their effectiveness.

## Keywords

Survey Mitigation strategies Social and environmental performance Sustainable transportation

### Citation

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Transportation systems and technology. ISSN 2413-9203 (Online). Menu Archives. A new type of transport can be effectively used in long-distance and suburban area of large cities to provide transportation from the center to the airports, sea, river and bus stations and transport hubs. It can be used for the cargo transportation. Creation of magnetic levitation transport promotes achievement of economic interests of the state and regions, gives rise to the development of promising areas of science and attract young scientists, researchers, development of new technologies, production processes, creation of new workplaces, etc. Transportation performance measures predict, evaluate, and monitor the degree to which the transportation system accomplishes adopted public objectives. They can be applied at all stages of transportation decision-making, as illustrated in Figure 1. Figure 1: Opportunities to Use Performance Measures to Improve Transportation Sustainability Image source: ICF International. Transport especially road transport has a strong environmental impact and a variety of measures can be taken to reduce environmental damage by road transport. No doubt, transport is essential for economic and human development. The environmental effects of transport differ by mode. Non-motorized transport generally does not harm the environment. ADVERTISEMENTS Impact of Power on Environment: Electricity constitutes one of the key infrastructural inputs for socio-economic development. Per capita electricity consumption in India has increased from a mere 15.6 kwh in 1950 to the current level of 360 kwh. Despite this per capita electricity consumption in the country is one-sixth the world average and one twentieth that in high counters.