

# **Integrated Infrastructure for Sustainable Improvement of Movement and Safety in Urban Road Corridors**

*The Case of Dar es Salaam, Tanzania*

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## **ABSTRACT**

This study, which was conducted in the capital city of Tanzania - Dar es Salaam investigated the impact of urban infrastructure interaction on movement and safety in Dar es Salaam arterial roads. By studying characteristics of urban infrastructure interconnections, the study sought to establish the effects of urban infrastructure interactions on movement and safety in order to recommend strategies for ensuring sustainable improvement of movement and safety in the road corridors.

There have been serious concerns about the effects of interaction of urban infrastructure on movement and safety, but this area has not been studied sufficiently so that relevant policy making organs and planners could be advice accordingly. The study employed both quantitative and qualitative research approaches. Data were collected through condition survey, questionnaires, interviews, documentary review, and observation using surveillance cameras.

The results indicate that movement and safety are serious problems in the road corridors in Dar es Salaam. It was revealed that infrastructure within the road corridor exist in inevitable interdependencies, which significantly causes deterioration of each other while impairing movement and safety. Impairment is seriously escalated by mismatches in standards and lack of coordination of operators in planning, designing, installation including operational approaches.

It is being suggested that in order to attain sustainable improvement of movement and safety, integrated high performance infrastructure has to be adopted; and for enhancing safety, a model has been developed for planners and engineers for evaluating safety compliance for existing and proposed infrastructure within the road corridors.