







Centrality indicators as an instrument to evaluate the integration of urban equipment in the area of influence of a rail corridor

Jorge Augusto Martins Gonçalves , **Licínio da Silva Portugal**  and **Carlos David Nassi** 

^aTransport Engineering Program – Federal University of Rio de Janeiro, Bloco H-106, P.O. Box 68512, Zip Code 21941-972, Rio de Janeiro, RJ, Brazil

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Abstract

The objective of this work is to formulate a structure of procedures to support projects to integrate neighborhoods in the area of influence of railway corridors and the urban facilities around each station. Based on the concept of centrality, formulated mathematically by graph theory and with the support of a geographic information system (GIS), we propose interventions aiming to create a more harmonious urban environment better in tune with sustainable mobility. We highlight the relevance of quantitative approaches in the study of urban concepts to foster integration between transportation and urban development, as well as the potential of their application in various Brazilian metropolises having commuter rail systems that are currently underutilized and in the process of revitalization.

Keywords: Railway; Centrality; Graph theory; Integration; Urban development

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