

Decision support for maintenance and upgrading of existing bridges

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Abstract

Maintenance of transportation infrastructure assets can be relatively expensive, since it does not only include the direct cost of interventions, but also the indirect consequences of traffic disruptions. To make optimal decisions about maintenance actions, including rehabilitation and upgrading, reliable information about the performance of existing structures is needed. However, obtaining such information might require significant efforts and can be done in various ways. The purpose of an ongoing Swedish research project BIG BRO is to develop a framework for a decision support methodology that can be used for implementing maintenance strategies for bridges on a rational basis. The present paper provides a brief overview about the project as well as describes some of the ongoing work.

Keywords: maintenance; rehabilitation; upgrading; infrastructure; bridges; decision support.