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Feasibility Risk Assessment of Transport Infrastructure Projects: The CBA-DK Decision Support Model

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Abstract

This paper presents the final version of the CBA-DK decision support model for assessment of transport projects. The model
conventional cost-benefit analysis resulting in aggregated single point estimates and quantitative risk analysis using Monte Carlo simu
in interval results. Two special concerns in this paper is firstly the treatment of feasibility risk assessment adopted for evaluatio
infrastructure projects, and secondly whether this can provide a more robust decision support model. This means moving away from
estimate to an interval result, and the determination of suitable probability distributions. Use is made of the reference class forecasti
such as that developed in Optimism Bias for adjustments to investment decisions that relate to all modes of transport. The CBA-DK d
model results in more informed decision support towards decision-makers and stakeholders in terms of accumulated descendin
decision support method developed in this paper aims to provide assistance in the analysis and ultimately the choice of action, while
the uncertainties surrounding any transport appraisal scheme.

Keywords: Decision Support System; Risk Analysis; Reference Class Forecasting; Cost-Benefit Analysis; Transport Assessment