

## **An Evaluation Approach to Railway Freight Transport based on the Economic Efficiency**

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Facing the global warming problem and the coming low birthrate & aging society, railway freight transport is expected to play a more important role in the provision of reasonable solutions as an eco-friendly transport means. In this paper, a synthetic evaluation approach to railway freight transport based on multiple respects and corresponding indices is studied to improve freight transport efficiency. Firstly, an evaluating model with an analytical and hierarchical process is built, using the shippers' consciousness data for making the decision of freight transport. And then, a rail freight geographic information system (RF-GIS) is developed to analyze the actual situations of rail freight train on the corridors. Finally, through a case study, a comparative evaluation between rail container and truck transport is performed, using the developed approach, and the effectiveness of the relevant measures in improving rail freight is investigated.