# An Application of Data Mining to Bus Eco-driving Analysis

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## Abstract

Bus is one major source of greenhouse gases emission in the highway transportation in Taiwan due to its long-term driving on highways. This study aims to develop an eco-driving analysis model for bus service companies to analyze driving behavior of bus drivers and identify the non-eco-driving drivers through the applications of data from digital tachograph and data mining techniques. A data mining method is used in the analysis model to analyze the key factors of fuel consumption efficiency. Through the model application of a real example, results indicate that standard deviation (SD) of revolutions per minute (RPM) and high RPM and low speed percentage are two major factors which significantly influence fuel consumption efficiency.

Keyword：bus, greenhouse gases, eco-driving, tachograph, data mining