

國道客運公司因應駕駛工時管制規定之駕駛替換方案評估分析

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摘要

In 2010, Legislative Yuan passed a bill to regulate the continuous driving time of bus drivers. The operation of bus companies which provide the long-distance (e.g. over 300 km) intercity passenger service will be inevitably impacted by the bill. The most straightforward strategy for these bus companies to respond the new regulation is to set the maximum limit of driving hour and have drivers take a 30-minute break once their driving hours are approaching the limit. This mode of operations, however, would significantly influence the travel time of passengers. Thus, how to propose an appropriate business strategy for bus companies to meet driving hour limit, passenger rights and the company operation objectives has become an important research topic. This study applies a mathematical programming approach, by minimizing the total passenger travel time subject to the operating environment and driving hour restrictions, to propose a driver exchange scheme. The results of the case study of the Taipei - Kaohsiung route show that the proposed driver exchange scheme would perform better than other alternatives. The proposed driver exchange scheme is useful for the intercity bus companies to develop their operation strategies given the constraint of driving hour regulation.

關鍵字：Driving hours, Bus companies, Driver exchange scheme