

The Impact Analysis of Roadside Advertising Content on Bus Driving  
Behavior on Freeways Using a Bus Driving Simulator

張建彥, 魏智浩

Transportation Technology and Logistics Management

Management

axle@chu.edu.tw

Abstract

The roadside advertising object (T-Bar with commercial advertisements) is one recurrent event usually happening on the freeway systems in Taiwan. The object usually attracts drivers to watch the commercial advertisements posted on it and increases the parallel processing workloads of drivers, causing drivers' visual distraction. Hence it is necessary to study the impacts of roadside advertising content on bus drivers and provide the related traffic management measures. This study integrates a bus driving simulator and the faceLAB system to analyze the influences of various complexity levels of roadside advertising content combining text and number on bus driving behavior on freeways. Results show that the average perception-reaction time increases with the increase of driving speed. The average perception-reaction time of bus drivers responding to events with number advertising content is higher than that with text advertising content.

Keyword : Roadside Advertising, Content, Freeway, Bus, Driving Simulator.