Perception of Public Transport Quality of Service among Regular Private Vehicle Users in Five European Cities

Authors: Juan de Ona, Esperanza Estevez, Rocío de Ona

Abstract: Urban traffic levels can be reduced by drawing travelers away from private vehicles over to using public transport. This modal change can be achieved by either introducing restrictions on private vehicles or by introducing measures which increase people's satisfaction with public transport. For public transport users, quality of service affects customer satisfaction, which, in turn, influences the behavioral intentions towards the service. This paper intends to identify the main attributes which influence the perception private vehicle users have about the public transport services provided in five European cities: Berlin, Lisbon, London, Madrid and Rome. Ordinal logit models have been applied to an online panel survey with a sample size of 2,500 regular private vehicle users (approximately 500 inhabitants per city). To achieve a comprehensive analysis and to deal with heterogeneity in perceptions, 15 models have been developed for the entire sample and 14 user segments. The results show differences between the cities and among the segments. Madrid was taken as reference city and results indicate that the inhabitants are satisfied with public transport in Madrid and that the most important public transport service attributes for private vehicle users are frequency, speed and intermodality. Frequency is an important attribute for all the segments, while speed and intermodality are important for most of the segments. An analysis by segments has identified attributes which, although not important in most cases, are relevant for specific segments. This study also points out important differences between the five cities. Findings from this study can be used to develop policies and recommendations for persuading.

Keywords: service quality, satisfaction, public transportation, private vehicle users, car users, segmentation, ordered logit

Conference Title: ICST 2020: International Conference on Sustainable Transportation

Conference Location : Montreal, Canada **Conference Dates :** August 04-05, 2020