

The changes in travel habits, is public transportation the future of urban mobility?

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Abstract

The United Nations, UN-Habitat, reveals that in 2020, 56.2% of the world's population lived in urban areas. Thus, urban mobility becomes a point of attention for governments, transport operators, policymakers, and researchers as questions on travel demand and its environmental impacts arise. In this scenario, public transportation assumes a critical role as a viable alternative to private cars. However, are people willing to shift to public transport, and which factors contribute to it?

This study focuses on a temporal analysis to understand which factors contributed to transport mode choice and how it changed over time. The data was collected by *Instituto Nacional de Estatística (INE)* from mobility surveys from 2000 and 2017 in the metropolitan area of Porto, Portugal. The study applies discrete choice modeling techniques to achieve the objectives in line with the traditional methods under this topic. Estimation results of the mode choice models are successfully incorporated to compare travel behavior trends during the studied period.

The study is ongoing under the Master thesis development and is expected to contribute to the knowledge of the factors (sociodemographic and trip description) that may influence the mode choice, particularly regarding the public transport choice, and discuss the evolution of time taking into account the investments made on public transport in the Porto metropolitan area (e.g. metro network expansion).

Keywords: Travel behaviour; Discrete choice model; Intertemporal analysis; Mobility survey; Mode choice.