## **ABSTRACT**

Luxembourg is among the first countries worldwide to introduce free-fare public transportation for everyone. A few years after the introduction in February 2020, however it has been noted that this policy did not have the desired effect on reducing car use in the Grand. Duchy. That is why this study was conducted, in order to find out what the reasons for car use in Luxembourg are, despite access to free-fare PT in order to help ameliorate the infrastructure of PT in Luxembourg to help reach the goals set by the PNM 2035.

After giving a brief introduction on sustainability in Luxembourg and the envisioned changes to mobility by 2035, this study focuses heavily on the perceived advantages and disadvantages of car and PT use, while also investigating the psychological reasons for car use and the limitations to behavioural change regarding mobility.

This research employed a quantitative approach with questions/statements rooted in the literature in the aforementioned topics and fields. The participants are firstly asked a few demographic questions before being presented with a 5-Point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) and indicating to what extent they agree or disagree with statements regarding benefits and drawbacks of car of PT use, inspired from previous relevant research, and a few statements regarding their intent to use PT more if certain changes or improvements were to be made.

The findings suggest clear favouritism for car use in Luxembourg, where the benefits that were presented to the participants such as convenience, time savings, of "freedom" were identified to be the most significant. Furthermore, PT was heavily criticised for factors such as safety, convenience, accessibility, punctuality, overcrowdedness, and stress, hinting at the argument that the infrastructure is not up to par or is not attractive enough for people in Luxembourg to be a viable option for mobility. The results also suggest that the reasons for car use are rather emotional in nature than functional, evidenced by the biggest factor in the decision-making for car use being the perceived convenience compared to PT. While the interest to use PT more is given in Luxembourg, according to the results, certain improvements need to be made first. The accessibility of PT in rural areas was criticised by the participants with however also a clear indication that they would use PT more if this concern were to be addressed. As of right now the problem lies that PT in Luxembourg is not as available and convenient for people as a car. If presented the option to choose between the two modes of transportation, the decision is made by the perceived higher convenience of car use compared to PT and justified by the drawbacks of PT.