

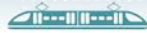
# Acceptance of Transport Policy Measures Prediction and Associations with Demographic, Resource-based, and Attitude-based Variables

TØI Report 1975/2023 • Authors: Lars Even Egner, Petter Christiansen, Susanne Nordbakke, Erik Bjørnson Lunke • Oslo 2023 • 69 pages

- The purpose of the project was to investigate acceptance of transport policy measures, such as road tolls, and the relationship of this acceptance to demographic and other variables. Knowledge of these factors can help to better predict support and opposition to transport policies.
- We based our findings on several surveys completed by a total of 2,105 respondents. The respondents are somewhat older, male, car users, living in central areas, and more highly educated than the national average.
- The survey shows general support for reducing overall car use, but also opposition to specific measures to achieve this.
- Analyses show that political orientation, car use, and residential centrality have a strong correlation with acceptance of restrictive car policy measures. We find no statistical correlation between acceptance and gender, age, marital status, and income when party affiliation is controlled for, but do find correlations with education, parental responsibility, number of cars, car use, and electric car ownership. Environmental attitudes have a very strong correlation with acceptance.
- The report provides a good basis for predicting acceptance of, but more extensive research is needed to establish causal relationships.

The purpose of this project was to explore variations in acceptance of transport policy measures within the population, hereby referred to as "acceptance." This includes demographic variables, such as age, gender, education, and income, as well as subjective variables like political orientation and attitudes. Understanding the factors associated with resistance and acceptance can help predict them to some extent, enabling the implementation of more widely supported transport policy measures.

The report primarily relies on a survey conducted in 2019, involving 2,105 respondents. It was an additional survey accompanying the 2016-2018 travel behaviour survey. Consequently, the sample is somewhat skewed towards an older, male-dominated, car-owning, urban population with higher education levels compared to the national average. Respondents expressed their views on various restrictive car policies, and provided information on structural conditions, household characteristics, transportation resources, attitudes, values, and travel habits.



Descriptive analysis of the data reveals that respondents generally hold a positive attitude towards general outcome goals, such as reducing private car usage in city centres. However, they exhibit more pronounced resistance towards specific measures, such as limiting parking facilities. Acceptance demonstrates strong associations with political affiliation, car usage, and urbanity. The greater the left-leaning political affiliation, less frequent car usage, and more urban the residence, the higher the acceptance. When accounting for each other, political affiliation has a greater explanatory power than car usage, which, in turn, has a greater explanatory power than urbanity.

When considering acceptance as a whole no correlations are found between acceptance and gender, age, marital status, or income. However, correlations are found between acceptance and education, parenthood, the number of cars in the household, car usage, and electric vehicle ownership. With regards to other attitudes, strong associations are found between acceptance and the extent to which individuals identify themselves as a “car-person”, environmental issues, as well as driving pleasure.

Analysis of intermediate variables indicates that almost all influence on acceptance is mediated through attitudes towards environmental considerations. For instance, education exhibits a strong correlation with acceptance because education affects environmental considerations, which, in turn, influence acceptance. The association is so pronounced, that measuring environmental considerations is almost tantamount to measuring acceptance, and vice versa. The analysis does not find any meaningful association between electric vehicle accessibility and acceptance when controlling for other variables.

Support for general outcome goals, but resistance to specific measures, can make it challenging to transition from a political objective to concrete actions. Being in favour of an outcome while opposing the measures to achieve it is not necessarily an illogical standpoint, but further research is needed to explore this. Additionally, it is possible that a less restrictive car policy leads to increased car usage, which, as indicated in this report, is associated with lower acceptance. This, in turn, may result in an even less restrictive car policy. Implementing car-restrictive measures may be easier in central areas with higher levels of education. However, it should also be emphasized that acceptance is influenced by many other factors not considered in this report. While this report provides a solid foundation for predicting acceptance of transport policy measures, further specialized research is needed to better understand the factors associated with, and leading to, acceptance.