

## The impact of E-scooters on train travel and station access/egress mode choice



### Problem description

E-scooters (or e-steps) are a form of micromobility that has become highly successful in cities around the world, particularly through shared e-scooter systems appearing in most major cities around the world. This rapid success has also come with plenty of controversy, relating to safety (both that of the users and of others on the streets), parking (haphazardly parked scooters) and sustainability (short lifespan, induced demand,...). E-scooters are officially not yet a legal form of mobility in the Netherlands but could become one soon.

If/when e-scooters become legal in the Netherlands, a wide new array of possibilities will open up alongside with them. One major possibility would be for train travellers to take it with them onto the train, allowing them to use the e-scooter as both an access and egress mode for train trips. Previous research suggests that the first/last mile is a major influencing factor of public transport trips, accounting for up to 50% of the total travel time. Should e-scooters become available, what impact would they have on train travel and access/egress mode choice? Would they entice more people to travel by train? Which modes would be substituted on the first/last mile?

### Assignment

- Design and carry out a stated choice survey, capturing travellers' preferences for using private e-scooters as an access & egress mode for train trips
- Estimate a series of choice models to obtain taste parameter estimates, which you can use to determine the trade-off behaviour, modal shift and provide policy recommendations

### Candidate

- Should have taken the Statistical Analysis of Choice Behaviour (SEN1221) course or have experience with choice analysis

### Information

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