# Vacancy internship project – MSc. thesis Impact of COVID-19 on mobility

Introduction

Mobility is about the movement of people. And it is the people themselves that decide how, when and where their next movement takes place. This means that all our solutions somehow describe or forecast the choices of people on e.g. the frequency, destination, means of transportation and departure time of each movement and how all these choices interact resulting into mobility on a system-wide level. The challenge in most of our assignments lies in the combination of accurately describing and forecasting (fuzzy) human decisions and their spatial-temporal interactions whilst providing a complete, meaningful and consistent overview of their effect on the mobility system as a whole.

Problem description

Uncertainty about how the future will look like is possibly greater than ever. Technological development and crises need extensive planning and steering to prepare for the future. Especially now when it comes to the impact of COVID-19 on our mobility. We would like to explore: "The mobility after COVID-19". Hereby we are thinking of the following questions:

* How do the aversion to public transport, increasing car ownership, and more bicycles relate and how can we steer this?
* What will happen if we put climate and economic crisis on top of that?
* What is the smart thing to do now?

Assignment

We propose a System Dynamics approach to develop insights into the impact of mobility after COVID-19. Goudappel understand mobility from our extensive knowledge of behavior and traffic and are working on the development of SD models to guide our clients in (mobility) transitions. Central to the development of a system dynamic model is describing and quantifying causal relationships that define our mobility system. System dynamics uses feedback between the variables, so that certain variables can also influence themselves at a later point in time. Causes and consequences can be traced back throughout the system, via all variables involved. This helps to understand a complex system over time and provides guidance in policymaking.

Information

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More information on Goudappel can be found via [www.goudappel.nl](http://www.goudappel.nl).