

Agent-Based Model on the National Scale

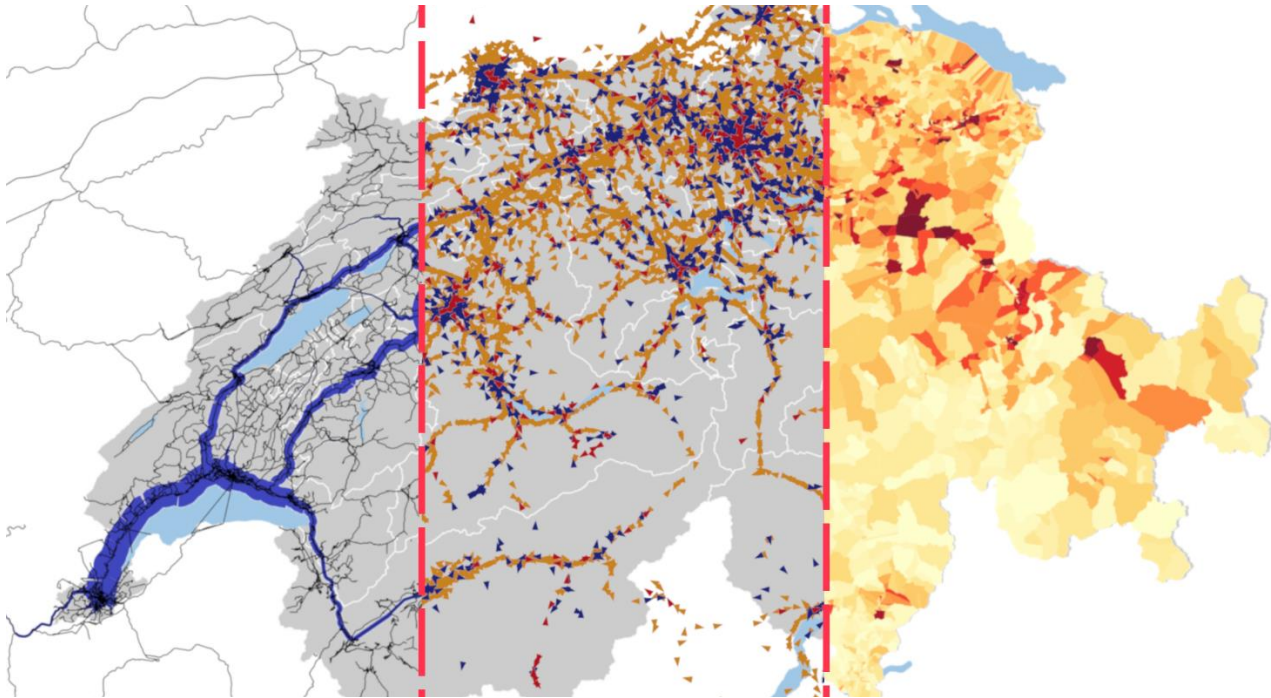


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As an employee of SBB, Wolfgang led the development of an agent-based model of Switzerland which includes all modes of transportation. The model includes a synthetic population, an activity-based demand model and agent-based traffic flow simulation. The model is used today for decision support within SBB and on behalf of partner organizations. The portfolio of applications includes assessment of service plans rail and bus, evaluation of intermodal mobility-services, and long-term forecasting of mobility and traffic up to 2050.

Services Provided by Wolfgang Scherr:

- From 2017 through 2020 project manager for the development of the model including customization of the software MATSim to the needs of SBB, building of all input datasets, automation of data flow between several modules, and calibration of the model.
- As product owner, prioritization of requirements and agile management for the development, updates, and application of the model – on the basis of stakeholder dialogue.
- Conception of external research projects with universities and supervision of know-how transfer to the SBB.

Project Owning Entity

Swiss Federal Railways (SBB)

Time Period

2017-2022

Country

Switzerland

Contact

Wolfgang Scherr
Wolfgang.scherr@moventes.net

Publications

2021 SIMBA MOBi - SBB-Video
 2021 Hermes: efficient MATSim
 2020 Application of the ABM to support real-world business cases
 2020 Microscopic Mobility Simulation
 2020 Towards agent-based travel simulation across all mobility choices
 2020 Simulation mit dem Verkehrsmodell SIMBA der SBB