

Microscopic Simulation-based Assessment of Impact of Large-scale Retail Store onto Regional Traffic

Hideki Fujii, Shinobu Yoshimura, Tatsuaki Kanou and Shohei Ninomiya

Abstract

In Japan the developer of a large-scale retail stores is obliged to submit the plan document to the local government with consideration of the impact on the life circumstance of the residents around it. In this study we tried to assess the impact on regional traffic by using a multi-agent-based traffic simulator. The target is the regional traffic around the shopping mall located in front of the central station of a city of 700 thousand people. We conducted some simulation scenarios with changing the rate of the customers using private cars and observed the traffic condition in the city.

H. Fujii (Corresponding author) • S. Yoshimura • T. Kanou • S. Ninomiya
School of Engineering, The University of Tokyo, 7-3-1 Hongo, Bunkyo,
Tokyo, Japan
Email: fujii@sys.t.u-tokyo.ac.jp

S. Yoshimura
Email: yoshi@sys.t.u-tokyo.ac.jp

T. Kanou
Email: t_kanou@save.sys.t.u-tokyo.ac.jp

S. Ninomiya
Email: s_ninomiya@save.sys.t.u-tokyo.ac.jp