

Paper Submission

The papers will be subject to the usual peer review process of International Journal of Transportation. Criteria for acceptance include originality, contribution, scientific merit, accuracy and readability. The final paper format must follow the standards found in the International Journal of Transportation – “Instructions for Authors” guide, available online at: <http://www.sersc.org/journals/%5BSERSC%5D%20Author%20Guidelines.pdf>

Authors should submit the manuscript to the online submission system at:
<http://submission.sersc.org/IJT/SI10>.

Expected Dates Schedule (Important Dates)

- Submission Deadline: October 31, 2013
- Notification of Acceptance: March 31, 2014
- Final Version Due: May 31, 2014
- Special Issue Publishing Date: August/December 2014

Merits of your special issue

As noted, this special issue on Agent based Modeling in Transportation Planning and Operations will highlight papers dealt with the state of the art applications of agent based modeling in which captures individual travelers' behaviors in the evaluation of transportation planning and operations. It is our intention that this special issue will summarize fundamental knowledge base and scientific methodology so that researchers and professionals in the transportation community can easily adopt these for their research and practical implementations.

Special Issue on: Agent Based Modeling in Transportation Planning and Operations

International Journal of Transportation

(<http://www.sersc.org/journals/IJT/>)

Submission Deadline: October 31, 2013

Guest Editors

Byungkyu “Brian” Park, bpark@virginia.edu
University of Virginia

Pamela Murray-Tuite, murraytu@vt.edu
Virginia Tech

Joyoung Lee, jo.y.lee@njit.edu
New Jersey Institute of Technology

Aim and Scope

In the analysis of urban transportation system, researchers and professionals have widely utilized simulation modeling tools for both transportation planning and operations. Among many challenges being faced with the simulation-based applications and evaluations, one of the areas that has gained special attention is how to incorporate individual travelers' characteristics. An agent based modeling approach has emerged in modeling these characteristics. Researchers used agents in modeling route choice, mode choice, departure time choice, acceleration and braking behavior, aggressive driving, etc. This is because agent-based modeling enables researchers and users to keep the personal traveler identity or a collection of them as agents and allows the users to trace and make use of the agents' characteristics in their planning and operations of transportation facilities. This special issue on agent based modeling in transportation planning and operations will consider for publication on selected papers presented at the Agent Based Modeling Conference.

Topics

Topics of interest in agent-based modeling include but are not limited to:

- Developing the daily activities of travelers
- Spatial markets simulations (housing, demographics, firm-graphics)
- Routing of travelers in a dynamic traffic simulation
- Large scale microscopic traffic simulations
- Impact of hybrid and plug-in-electric vehicles on mode choice and transportation system performance.
- Integrated Transportation Planning and Operations Applications
- Traveler willingness to pay for toll roads/HOT lanes
- Evacuation planning and emergency management
- Acceleration and braking behaviors of individual drivers
- Car following and lane changing behaviors in traffic models
- Aggressive vs. defensive drivers in the context of eco-driving
- Driver behavior in the environment of co-operative vehicle-highway systems
- Modeling heterogeneous vehicle to vehicle networks including driverless fleets
- Applications in freight transportation modeling