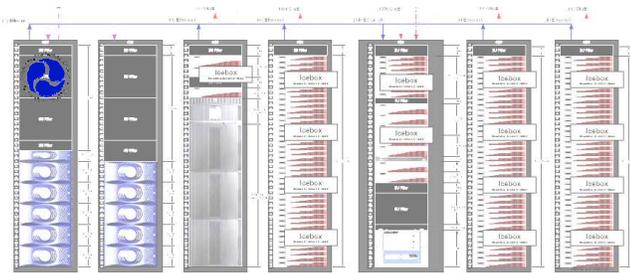


# TRANSIMS

## Training Course

June 23-25, 2009  
Houston, TX



The Transportation Research and Analysis Computing Center at Argonne National Laboratory will hold a training course on the regional transportation analysis code TRANSIMS. The course is targeting primarily analysts new to the TRANSIMS methodology, and covers both the theoretical underpinnings as well as the practical application of the code. Participants will develop a full understanding of the general TRANSIMS principles, implementation details, data requirements, capabilities, and limitations of the software.

TRANSIMS (short for Transportation Analysis and Simulation System) is an integrated set of tools developed to conduct regional multimodal transportation system analyses. With the goal of establishing TRANSIMS as an ongoing public resource available to the transportation community, TRANSIMS is made available by the Federal Highway Administration under a NASA Open Source Agreement and is therefore readily available to the community.

The software is compatible with regular Windows and Linux desktop or server systems, but can also make use of high performance computing systems such as the TRACC cluster, a 512 core Linux system with 240TB of disk space and extremely fast network connections across the United States. This cluster is generally available to researchers in the US transportation community and is currently being used for TRANSIMS traffic simulation, emergency evacuation modeling, computational fluid dynamics for bridge analysis, and structural mechanics codes to determine crashworthiness and structural integrity of highway components and vehicles.

[www.tracc.anl.gov](http://www.tracc.anl.gov)



Houston is acknowledged as the Energy Capital of the World and is one of the new TRANSIMS users.

### Location

The training course will be held at the **College of Technology, University of Houston (UH)** (see maps on reverse side), in room 225, Technology Building. The training sessions will also be broadcast over the Internet (using Adobe Connect) at

<http://anl.acrobat.com/transims/>

### Registration

Participation in the training course is free. \$30 will be charged for training materials and refreshments if you attend the training in person. Travel, lodgings, and other expenses are the responsibility of the participant. Please contact us at the number or E-mail address shown below if you would like to attend the training sessions either by Internet or in person.

*This is the eight TRANSIMS training course held by TRACC. It has evolved from the need to quickly and efficiently train students and collaborators in the practical application of the code. While addressing the fundamental principles to a degree that allows for a better understanding of the capabilities and limitations of the TRANSIMS approach, the main focus is on the use of the individual components. It also focuses on the issues of network conversion, trip conversion, routing, microsimulation, feedback, and visualization.*

#### Instructor:

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#### Local Arrangements:

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**TRACC**  
**Transportation Research and  
Analysis Computing Center  
at Argonne National Laboratory**



UChicago

Argonne, LLC



# TRANSIMS

## Training Session

### Agenda

#### Tuesday, June 23, 2009

- 9:00 am Introductions, Project Overview, Discussion of Agenda
- 9:15 am Background of TRANSIMS at TRACC
- 10:00 am General Overview of TRANSIMS and its Components
- 10:45 am **Coffee Break**
- 11:00 am The TRANSIMS Road Network and Transit Network
- 12:00 pm **Lunch Break**
- 1:15 pm The TRANSIMS Router
- 2:45 pm **Coffee Break**
- 3:00 pm The TRANSIMS Microsimulator
- 4:30 pm Discussions
- 5:00 pm **Adjourn**

#### Wednesday, June 24, 2009

- 9:00 am The TRANSIMS Population Synthesizer
- 10:00 am The TRANSIMS Open Source Project – Available Resources
- 10:30 am **Coffee Break**
- 10:45 am The TRANSIMS Activity Generator
- 12:00 pm **Lunch Break**
- 1:15 am TRANSIMS Configuration and Framework
- 2:00 pm TRANSIMS Control Files and Syntax
- 3:00 pm **Coffee Break**
- 3:15 pm TRANSIMS Trip Table Conversion
- 4:30 pm Discussions
- 5:00 pm **Adjourn**

#### Internet Broadcast

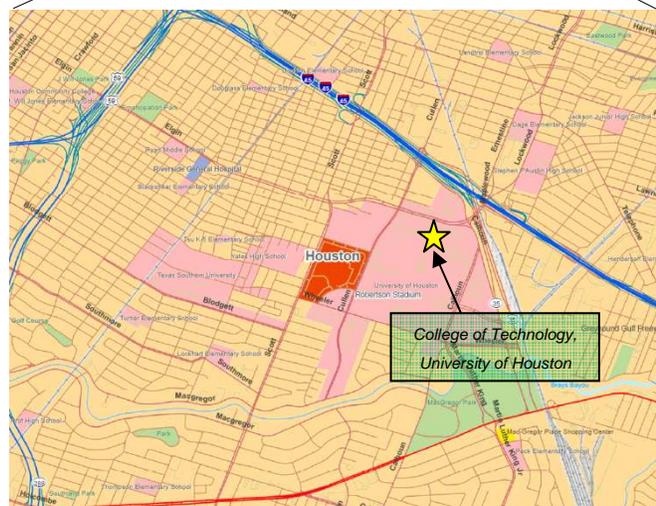
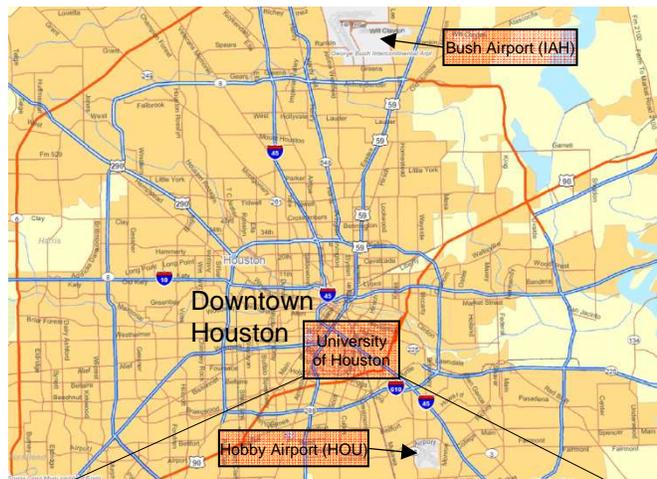
<http://anl.acrobat.com/transims/>

Detailed instructions can be found on the TRANSIMS forum site in the "Front Desk" section.

#### Thursday, June 25, 2009

- 9:00 am TRANSIMS Feedback and Equilibration
- 10:30 am **Coffee Break**
- 10:45 am TRANSIMS GIS Tools
- 11:15 am TRANSIMS Subarea Simulation
- 12:00 pm **Lunch Break**
- 1:15 pm Introduction to the TRANSIMS SVN Source Code Archive and Code Structure
- 2:15 pm Partitioning and Parallel Processing
- 3:00 pm **Coffee Break**
- 3:15 pm TRANSIMS on the TRACC Cluster
- 4:30 pm Discussions
- 5:00 pm **Adjourn**

#### Training Site



Training Site: Facilities at the College of Technology in UH. Visitor parking is available on-site (please visit [www.uh.edu](http://www.uh.edu)). For lodging, visitors are referred to take the Hilton University of Houston, which is within 5 minutes walking distance to the training site ([http://www1.hilton.com/en\\_US/hi/hotel/HOUUHF-Hilton-University-of-Houston-Texas/index.do](http://www1.hilton.com/en_US/hi/hotel/HOUUHF-Hilton-University-of-Houston-Texas/index.do)).