



TRANSIMS

Training Course

December 16-18, 2009

West Chicago, Illinois

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 180 TB 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.

Location

The training course will be held at the **DuPage Airport Flight Center in West Chicago** (see map on reverse side) where Argonne's TRACC offices are located. The training sessions will be held on the third floor of the flight center at the TRACC Training Center. 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. 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 ninth 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.

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



UChicago
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Agenda

Wednesday, Dec 16, 2009

- 9:00 am Introductions, Project Overview, Discussion of Agenda
- 9:15 am Background of TRANSIMS at TRACC and Introduction to the Chicago Metropolitan Area Model - [Section 0](#)
- 10:15 am **Coffee Break**
- 10:30 am General Overview of TRANSIMS and its Components - [Section 1](#)
- 12:00 pm **Lunch Break**
- 1:15 pm The TRANSIMS Road and Transit Networks - [Section 2](#)
- 2:45 pm **Coffee Break**
- 3:00 pm The TRANSIMS Router - [Section 5](#)
- 4:30 pm Discussions
- 5:00 pm **Adjourn**

Thursday, Dec 17, 2009

- 9:00 am The TRANSIMS Microsimulator - [Section 6](#)
- 10:30 am **Coffee Break**
- 10:45 am TRANSIMS Trip Table Conversion - [Section 10](#)
- 12:00 pm **Lunch Break**
- 1:15 am TRANSIMS Control Files and Syntax - [Section 9](#)
- 2:00 pm TRANSIMS Configuration and Framework - [Section 8](#)
- 3:00 pm **Coffee Break**
- 3:15 pm The TRANSIMS Open Source Project – Available Resources - [Section 13](#)
- 3:45 pm Visualization Tools and Techniques - [Section 17](#)
- 4:30 pm Discussions
- 5:00 pm **Adjourn**

Internet Broadcast

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

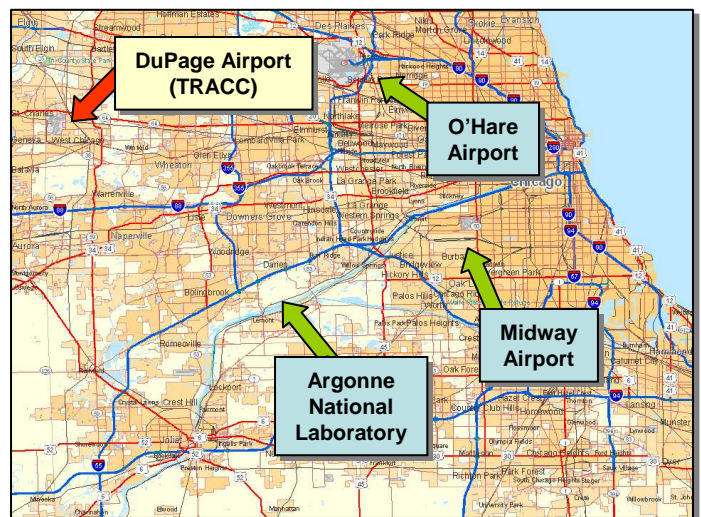
Detailed instructions can be found on the TRANSIMS forum site in the "Front Desk" section.



Friday, Dec 18, 2009

- 9:00 am TRANSIMS Feedback and Equilibration - [Section 7](#)
- 10:30 am **Coffee Break**
- 10:45 am TRANSIMS GIS Tools - [Section 11](#)
- 11:15 am TRANSIMS Subarea Simulation - [Section 12](#)
- 12:00 pm **Lunch Break**
- 1:15 pm Introduction to the TRANSIMS SVN Source Code Archive and Code Structure - [Section 15](#)
- 2:15 pm Partitioning and Parallel Processing - [Section 14](#)
- 3:00 pm **Coffee Break**
- 3:15 pm TRANSIMS on the TRACC Cluster - [Section 16](#)
- 4:30 pm Discussions
- 5:00 pm **Adjourn**

TRACC Location



Parking

Please use the long term parking lots at the DuPage airport flight center (free parking). The small parking lots closer to the terminal building are mostly reserved for FAA vehicles.