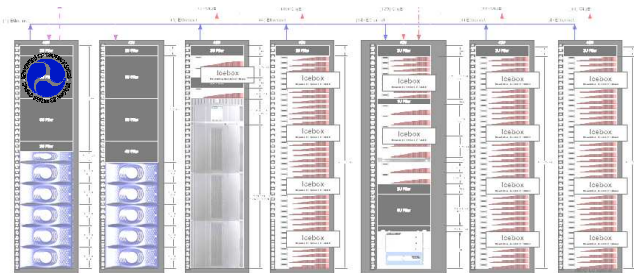# Argonne
NATIONAL LABORATORY

Moreno Valley is one of TRANSIMS' newest users and was recently named one of the fastest-growing cities in the nation.

TRANSIMS
Training Course
January 27-29, 2009
Moreno Valley, CA

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.

Location

The training course will be held at the **City of Moreno Valley Conference and Recreation Center** (see maps on reverse side), in Alessandro Room A. 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 sixth 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:
Dr.-Ing. Hubert Ley
Argonne TRACC
Suite 201
2700 International Drive
West Chicago, IL 60185
630 578 4250
TRANSIMS@anl.gov
www.tracc.anl.gov

Local Arrangements:
John Kerenyi, P.E.
City of Moreno Valley
14177 Frederick St
P.O. Box 88005
Moreno Valley, CA 92552
951 413 3140
johnk@moval.org
www.moval.org

TRACC
Transportation Research and Analysis Computing Center
at Argonne National Laboratory

UChicago ▶
Argonne LLC

www.tracc.anl.gov

A U.S. Department of Energy laboratory managed by UChicago Argonne, LLC

TRANSIMS
Training Session Agenda

Tuesday, Jan 27, 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 pm	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, Jan 28, 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, Jan 29, 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: Alessandro Room A, City of Moreno Valley Conference and Recreation Center, 14075 Frederick St (southwest corner of Frederick St and Alessandro Blvd) Free parking is available on-site.