TRANSIMS Training Course
September 7-8, 2010
Washington D.C.

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 1024 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.

Washington D.C. is no stranger to TRANSIMS – the sample dataset is after all D.C.’s next door neighbor Alexandria, VA

Location

The training course will be held at the Turner Fairbank Highway Research Laboratory (see maps on reverse side).

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 twelfth 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. This year, participants will also gain experience in the new TRANSIMS studio application. Therefore use of a laptop while attending the lectures is highly encouraged.

Instructors:

Dr. Hubert Ley
Michael Hope
Argonne TRACC
Suite 201
2700 International Drive
West Chicago, IL 60185
630 578 4250
TRANSIMS@anl.gov
www.tracc.anl.gov

Local Arrangements:

Joe Bared
FHWA
Joe.Bared@dot.gov

Brian Gardner
FHWA
Brian.Gardner@dot.gov
202 366 4061

www.tracc.anl.gov

TRACC
Transportation Research and Analysis Computing Center at Argonne National Laboratory

A U.S. Department of Energy laboratory managed by UChicago Argonne, LLC
TRANSIMS
Training Session
Agenda

Tuesday, September 7, 2010

8:00 am  Introductions, Project Overview, Discussion of Agenda
8:15 am  Background of TRANSIMS at TRACC
9:00 am  General Overview of TRANSIMS and its Components
9:45 am  Coffee Break
10:00 am The TRANSIMS Road Network and Transit Network
11:00 am TRANSIMS Trip Table Conversion
12:00 pm Lunch Break
1:15 pm  The TRANSIMS Microsimulator
2:45 pm  Coffee Break
3:00 pm  Discussions
4:00 pm  Adjourn

Wednesday, September 8, 2010

8:00 am  TRANSIMS Studio presentation and demo
9:30 am  Coffee Break
9:45 am  TRANSIMS on the TRACC Cluster
11:00 am TransimsEDT presentation and demo
12:00 am Lunch Break
1:15 pm  TransimsVIS presentation and demo
2:45 pm  Coffee Break
3:00 pm  Discussions
4:00 pm  Adjourn

Training Site:
Turner Fairbank Highway Research Laboratory is located at 6300 Georgetown Pike, McLean, VA.
http://www.tfhrc.gov/
(202) 493-3165