

Traffic Simulation with TransModeler

Course Date: December 18-20, 2017

Time: 9:00 AM – 5:00 PM (Sign-in 8:45 AM)

Location: ITRE Computer Lab (Room 3425), Research Building IV, 909 Capability Drive, Raleigh, NC

Contact: Joseph Huegy, jbhuegy@ncsu.edu, 919-513-7378

Fee: \$1,200.00 per participant

Register: <https://commerce.cashnet.com/NCSUITRE?CNAME=ENGINRELATED>

This three-day training course will be held at ITRE on NC State University's Centennial Campus. Instructed by Caliper staff, the course will help you understand TransModeler and how to use it effectively and productively. Below is an overview for each day of training. There is a one-hour break each day for lunch on your own. Maximum class size is 12 participants. A campus parking pass will be emailed prior to the first day of class.

Day 1: Creating and Managing Projects

› *Part 1: Introduction, interface basic skills*

Working with maps and layers; Working with dataviews; queries and selection sets; working with matrices; map tools; Selection toolbox, & tools

› *Part 2: Simulation projects*

Project Overview: From simulation to output; creating a simulation project; project settings

› *Part 3: Simulation databases*

Overview of simulation database layers; editing a simulation database; checking and reloading a network

Day 2: Preparing Traffic Control and Demand Data

› *Part 1: Traffic control*

Editing intersection control; editing traffic management signals & signs; creating & editing toll plazas

› *Part 2: Traffic demand*

Turn movement-based routing; creating & filling trip matrices; trip schedule files; trip data & path tables; routing inputs & settings

› *Part 3: Additional procedures*

Editing trip matrices; traffic assignment; O-D matrix estimation

Day 3: Simulation and Reporting / Models and Parameters

› *Part 1: Simulation and reporting*

Selecting output & preparing for simulation; simulation modes & options; simulation tools; output collection & management; creating reports, themes, tables & charts; creating layouts; running a simulation playback

› *Part 2: Other simulation & output tools*

Superlink manager; path browsing & editing; creating & modeling incidents; trip table query builder & browser

› *Part 3: Models & parameters*

Vehicle fleet; driver behavior; road classes & functional class lookup tables; signal defaults & templates

› *Part 4: Other models & parameters*

Hybrid traffic simulation; Meso & Macro model parameters