

### TRANSMODELER TRAINING AGENDA

### University of Florida, March 14-15, 2019

TTE 6259: Urban Streets Simulation and Control

#### March 14: CREATING AND MANAGING PROJECTS

## PART 1: TRANSMODELER INTRODUCTION AND DEMONSTRATION

WHERE: WEIL 457 WHEN: THURSDAY 9AM TO 12PM

- Public Transport, Signal Preemption, and Priority
- ITS and ATMS Strategies including Ramp Metering
- Modeling Incidents and Work Zones
- Managed Lanes and Toll Road Analysis
- Isolated or Corridor Signal Optimization
- Traffic Impact Analysis
- Connected and Autonomous Vehicles

#### PART 2: HANDS-ON - ORIENTATION

WHERE: WEIL 513 WHEN: THURSDAY 12:30 TO 3PM

- Quick Start A Completed Simulation Project
- Map, Table, and Matrix Windows and Tools
- Model Inputs, Settings, Parameters, and File Types
- Map Layers Links, Segments, Lanes, Lane Connectors, Nodes, Centroids and Vehicles

- Survey of Project Development Tools and Features
- Summary of Simulation Outputs and Range of Applications

## PART 3: HANDS-ON – CREATING SIMULATION PROJECTS AND SCENARIOS

WHERE: WEIL 513 WHEN: THURSDAY 3:15 TO 6PM

- Use Road Editing Tools to Create a Freeway Interchange and Adjacent Urban Streets
- Use Intersection Tools to Define Intersection Control
- Demand Turning Volumes versus Trip Matrices
- Scenarios No Build versus Build Alternatives

#### March 15: ADVANCED SIMULATION METHODS AND APPLICATIONS

### PART 1: HANDS-ON – SIMULATION, REPORTING, AND VISUALIZATION

WHERE: WEIL 513 WHEN: THURSDAY 9AM TO 12PM

- Running and Visually Auditing a Simulation
- Preparing for Simulation Output
- Batch Simulations and Fixed Random Seeds
- Managing Output and Producing Reports
- Visualizing Projects in 3D

## PART 2: ADVANCED METHODS – ROUTING AND DYNAMIC TRAFFIC ASSIGNMENT

WHERE: WEIL 513 WHEN: THURSDAY 1PM TO 3:30PM

- Route Choice Concepts and Traveler Characteristics and Information
- Dynamic Traffic Assignment (DTA)

- Origin-Destination Matrix Estimation (ODME)
  Concepts
- Calibration using Route Choice Parameters and Path Auditing Tools

# PART 3: SOFTWARE INTEGRATION – ENHANCED PRODUCTIVITY, SCALABILITY, FLEXIBILITY

WHERE: WEIL 513 WHEN: THURSDAY 4 TO 6PM

- · Import from HCS
- Import from Synchro
- Planning Model Import and Integration
- Support for GIS and CAD Tools