Highway Capacity Analysis Training

Highway Capacity Manual (HCM 2010)
Highway Capacity Software (*HCS 2010*)

This course includes lectures, software demonstrations and application examples on the Highway Capacity Manual (HCM) 2010 procedures. Step-by-step instruction of the HCM 2010 methodologies will be provided for each analytical chapter. The upgraded Highway Capacity Software (*HCS 2010*) implements and automates the HCM 2010 procedures. Each lecture will be followed by working example problems and a software demonstration using the *HCS 2010*. A comprehensive workbook is provided and a general agenda follows:

Day 1

Highway Capacity Manual
- Overview of Changes, Chapter by Chapter
- General Principles and Concepts

Freeways and Highways
- Basic Freeway Segments, Weaving Areas, Merge & Diverge, Facilities
- Multilane and Two-Lane Highways

Day 2

Unsignalized Intersections
- Stop Control: TWSC and AWSC
- Roundabouts

Signalized Intersections
- NEMA Phasing and Phase Duration Procedure
- Oversaturated and Multiple-Period Analysis
- Saturation Flow and Incremental Queue Accumulation

Urban Streets
- Flow Profile, Platoon Dispersion and Access Points
- *HCS 2010* Optimization, Animation and Visual Mode
- Interchange Ramp Terminals

William M. Sampson, P.E. is a faculty member of the University of Florida (UF) Department of Civil Engineering with over 35 years of experience. He is the Director of the Mc*Trans* Center and also is responsible for technical assistance and ongoing development of the Highway Capacity Software (HCS). He teaches two graduate courses (Traffic Engineering and Highway Capacity Analysis) at UF. He is a member of the Transportation Research Board (TRB) Highway Capacity and Quality of Service (HCQS) committee.