

HCM 2010 Major Update

The Transportation Research Board (TRB) Highway Capacity and Quality of Service (HCQS) Committee and the National Cooperative Highway Research Program (NCHRP) project team are hard at work developing a major update to the 2010 Highway Capacity Manual (HCM). Several significant research projects have been completed to provide advances and expansions to these methodologies that further the breadth and accuracy of their application by practitioners.

One of the most important changes is the addition of Travel Time Reliability (TTR) procedures for freeway facilities and urban streets to model the effects of demand variations, weather, incidents, special events and work zones over an extended period of time. The inclusion of Active Transportation and Demand Management (ATDM) to this process generates an expanded method to estimate the effects of these strategies on appropriate measures of effectiveness for these facilities.

Another quite significant addition is the modeling of alternative intersections and interchanges, including diverging diamond interchanges, displaced left-turn intersections, restricted crossing



U-turn intersections, and median U-turn intersections. Modeling of U-turns and crossovers will be included to generate new saturation flow adjustments for computing experience travel times as vehicles navigate these expanded intersection designs.

Other major additions planned for the update include: managed lanes and work zone analysis on freeways; speed and capacity adjustment factors for weather and incidents on freeway segments; sustained queue spillback and work zones modeled on urban streets; auxiliary through lanes and a planning method for signalized intersections; and updated capacity equations and corridor analysis for roundabouts.

HCS 2010

Of course, McTrans has been working on implementing all of the updated procedures in the *HCS 2010*™. We plan to have the software in place for release when the HCM 2010 Major Update is published. We plan on a series of beta tests this coming year, so please watch out for these announcements if you are interested in participating.

Webinar Series Schedule

February 9	HCM 2010 and <i>HCS 2010</i> Overview
February 10, 11 & 12	HCM Chapters 16, 17, 18 & 22 and <i>HCS 2010</i> Signalized Intersections (Multiple-Period Analysis, Phase Duration) Urban Streets (Flow Profile, Access Points) and Interchanges
February 13	HCM Chapters 19, 20 & 21 and <i>HCS 2010</i> Unsignalized Intersections (TWSC, AWSC, Roundabouts)
February 17 & 18	HCM Chapters 10, 11, 12 & 13 and <i>HCS 2010</i> Freeway Segments (Basic, Weaving, Merge & Diverge, Facilities)
February 19	HCM Chapters 14 & 15 and <i>HCS 2010</i> Highway Segments (Multilane Highways, Two-Lane Highways)

Capacity Analysis Training – Coming in 2015

McTrans is updating all of its training courses to include changes coming to the Highway Capacity Manual. Currently, these changes are mentioned in presentation of workshops and webinars, but not yet formally added to the training material. The plan is to transition existing courses to cover the updated and new material coming in the updated HCM as information to users of what to expect in a year or so. New course sessions are being developed as well to expand on those procedures that will require more focus, such as travel time reliability and active transportation and demand management.

As was done when the HCM 2010 was being finalized,

McTrans will present one-day workshops on the HCM 2010 Major Update this coming year. The modifications and expansions to the HCM 2010 procedures will be described in this overview to present the broader perspective within short sessions. The target audience for the overview will likely include those interested from a higher level view, with the training courses more geared for the application practitioner.

Please see the list of McTrans training opportunities below that will be rolled out as they are completed during 2015 and contact us with any questions, or if you are interested in bringing a course to your area.

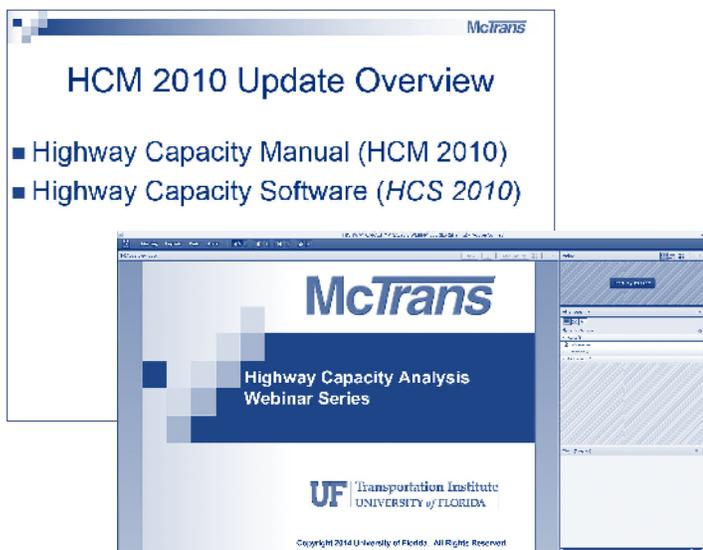
Courses:

HCM 2010 Major Update Overview (One Day)

– HCM 2010 and Major Update Changes Chapter-by-Chapter

Highway Capacity Analysis (Two or Three Days)

- Expanded to Include the HCM 2010 Major Update Changes and Additions
- Covering All Methodological Chapters Step-by-Step followed by *HCS 2010* Application Demonstrations
- Multimodal, Travel Time Reliability, Active Transportation and Demand Management (Optional Day 3)



Webinars:

HCM 2010 Major Update Overview Series (Four 90-Minute Sessions)

– HCM 2010 and Major Update Changes Chapter-by-Chapter

Highway Capacity Analysis Series (Eight or Twelve 90-Minute Sessions)

- Expanded to Include the HCM 2010 Major Update Changes and Additions
- Covering All Methodological Chapters Step-by-Step followed by *HCS 2010* Application Demonstrations
- Multimodal, Travel Time Reliability, Active Transportation and Demand Management (Optional)

Travel Time Reliability, Active Transportation and Demand Management (Four 90-Minute Sessions)

– Covering Freeway Facilities and Urban Streets Methodologies followed by *HCS 2010* Demonstrations

Highway Capacity Analysis Review Guidance (Two 90-Minute Sessions)

– Consolidated Topics Focused on Reviewing Submissions followed by *HCS 2010* Demonstrations