Release 7.3

This latest release incorporates the following new features: Freeways Travel Time Reliability and Managed Lane Crossweave; Highway Safety Software (HSS); and Roundabout Segments (see below).

Additionally, the Streets module now includes an Intersection Summary report for multiple signals on one page. Quick Streets now supports templates for importing Jamar and Miovision data. The SynchroToStreets tool has been updated to refine this conversion from Synchro data files.

Freeways Reliability

With Release 7.3, the Freeways module now models Travel Time Reliability for Travel Time Index and Reliability Rating from analyzing hundreds of scenarios for the variance of demand, weather, incidents, work zones and special events over time.

Freeways also now accounts for the cross-weaving effects that can reduce general purpose lane capacity for on-ramp traffic accessing managed lanes and managed lane traffic accessing off-ramps, which also facilitates demand variance within the managed lane facility. A new heatmap feature has been added to the report options.

Highway Safety Software

This new tool has been added with Release 7.3 to implement the Highway Safety Manual (HSM) procedures for Urban and Suburban Arterials and Intersections, as well as Rural Two-Lane Roads and Multilane Highways.

Following the HSM, AADT and geometric features are coded for intersections and segments to produce Safety Performance Functions (SPF) to be adjusted by applicable Crash Modification Factors (CMF) for generating predicted crash rates.

Intersections and segments can be combined into urban or rural facilities for individual and composite results.

Roundabout Segments

Roundabout Segments can be modeled with roundabout boundary intersections to generate Base Free-Flow Speed and Travel Speed for determining segment level of service similar to the Urban Streets process. Passenger-Car Equivalents can now be adjusted in the Roundabouts module as well.
A MESSAGE FROM BILL SAMPSON

It has been an exciting journey to implement the HCM6 procedures in the HCS7 with Travel Time Reliability and Alternative Intersections perhaps the biggest challenges. As has become expected for me, our staff and students have made all of this happen very quickly, efficiently and accurately to produce a tool that implements the HCM6 methodologies faithfully to preserve the research-driven and peer-reviewed set of procedures unparalleled in our profession. I want to congratulate our team on a very successful project!

Bill Sampson, Director

HCM 6th Edition Available

The Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis (HCM) provides methods for quantifying highway capacity. In its current form, it serves as a fundamental reference on concepts, performance measures, and analysis techniques for evaluating the multimodal operation of streets, highways, freeways, and off-street pathways. The Sixth Edition incorporates the latest research on highway capacity, quality of service, Active Traffic and Demand Management, and travel time reliability and improves the HCM’s chapter outlines. The objective is to help practitioners who are applying HCM methods to understand the basic concepts, computational steps, and outputs. These changes are designed to keep the manual in step with its users’ needs and present times.

You can order your copy from the Transportation Research Board (TRB) here: http://www.trb.org/publications/hcm6e.aspx
How to Set Up a Training Session

Scheduling a training course is easy and risk free. McTrans can arrange everything, only needing your help with the venue and local promotion, or we can provide the instruction and course materials for your meeting or conference – we are very flexible. We can present live courses in your area or for your organization, or set up a webinar series to cover the material remotely – saving time and travel for all participants. Workbooks are always provided, as are certificates to document PDH credit. Just let us know what you need and we will work with you to make it happen.

Highway Capacity Analysis Webinar Series
Including detailed information on HCM 6th Edition and HCS7

This webinar series presents lectures, software demonstrations and application examples on the Highway Capacity Manual (HCM) procedures – including updates in the 6th Edition. Step-by-step instructions of the HCM methodologies will be provided for each analytical chapter. The Highway Capacity Software (HCS) implements and automates the HCM procedures. Each lecture will be followed by working example problems and a software demonstration using the HCS7 prototype. A comprehensive workbook is provided to include all slides. Registration is provided in four sections (Streets, Unsignal, Freeways and Highways) with the Overview included with any registration and a discount for the entire series.

The series is organized over four days as follows with all presented from 2:00 PM to 5:00 PM ET. Detailed course descriptions and registration can be found at mctrans.ce.ufl.edu/training.

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<tr>
<td>August 14</td>
<td>2:00-3:30</td>
<td>HCM and HCS Overview, Major Changes, Principles, Concepts</td>
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<td>Signalized Intersections (NEMA, Phase Duration, Multiple-Period Analysis)</td>
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<td>August 15</td>
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<td>Urban Streets (Flow Profile, Access Points, Travel Time Reliability, ATDM)</td>
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<td>Freeway Segments (Basic, Weaving, Merge &amp; Diverge)</td>
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<td>Freeway Facilities (Travel Time Reliability, ATDM)</td>
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<td>Highway Segments (Multilane Highways, Two-Lane Highways)</td>
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HCM 6th Edition Webinar Video

The Highway Capacity Manual (HCM) 6th Edition is now available from the TRB. This ninety-minute video provides an overview of the changes as compared with the HCM 2010, including some methodological details and the implementation in the Highway Capacity Software (HCS7) – check our training page for availability at mctrans.ce.ufl.edu/training.

Overview of the new HCM 6th Edition and Comparisons with the HCM 2010

- Basic Freeway, Freeway Weaving and Freeway Merge & Diverge Segments (Speed-Flow Curves, Managed Lanes, Weather, Incidents, Calibration, Trucks)
- Freeway Facilities, Multilane Highways and Two-Lane Highways (Travel Time Reliability, ATDM, Managed Lanes, Weather, Incidents, Trucks)
- Unsignalized Intersections including TWSC, AWSC and Roundabouts
- Urban Streets Segments and Facilities including Reliability and ATDM (Roundabout Corridors, Sustained Spillback, Lane Blockage, RTOR, LOS)
- Ramp Terminals and Alternative Intersections (DDI, DLT, RCUT, MUT) (Experienced Travel Time, Extra Distance Travel Time, U-Turn Crossovers)
- HCS7 Demonstration of HCM6 Implementation.