

HCM Update Overview

The Highway Capacity Manual (HCM 2010) is now finalizing a Major Update. *McTrans* will be presenting a webinar series to provide an overview of the changes as compared with the current HCM 2010, including many methodological details.

The information provided in this workshop is a fairly technical overview toward learning what to expect from the updated HCM 2010 procedures in chapter-by-chapter descriptions, including demonstrations of progress toward their implementation in the Highway Capacity Software (*HCS7™*).

You can access detailed course descriptions and register for the series or individual sessions at *McTrans* here:

<http://mctrans.ce.ufl.edu/training/>

The first series was presented in early July and filled up, prompting the scheduling of more.

We plan to continue these, as well as one-day live courses, throughout the fall and into 2016 to spread the word on this important update to the HCM. The short-term tentative schedule for the webinars is shown below.

Overview Webinar Schedule

August 10, 11, 12, 13

September 1, 2, 3, 4

September 22, 23, 24 25

An outline of the material presented in this webinar series (and the one-day seminar) is below. The webinar is covered in four ninety-minute sessions—including demonstrations of the ongoing development of the Highway Capacity Software (*HCS7*) to be released concurrent with the publication of the HCM Update.

Basic Freeway Segments: Speed-Flow Curves, Managed Lanes, Weather, Incidents, Calibration, Trucks, Planning

Freeway Weaving Segments: Managed Lanes, Weather, Incidents, Calibration, Trucks, Planning

Merge & Diverge Segments: Managed Lanes, Weather, Incidents, Calibration, Trucks, Planning

Freeway Facilities: Travel Time Reliability, ATDM, Managed Lanes, Weather, Incidents, Trucks, Planning

Multilane Highways: Speed-Flow Curves, Trucks, Planning

Roundabouts: Capacity Models, Roundabout Corridors, Planning

Signalized Intersections: Heavy Vehicle & Grade, Unsignalized Movements, Critical v/c, Auxiliary Thrus, Planning

Urban Street Segments: Free-Flow Speed, RTOR Flow, Lane Blockage, Sustained Spillback, Level of Service, Planning

Urban Street Facilities: Travel Time Reliability, ATDM, Planning

Ramp Terminals & Alternative Intersections: Experienced & Extra Distance Travel Time, DDI, DLT, RCUT & MUT

HCS7 Demonstration: Progress on implementation of updated procedures with the *HCS7* module development



Alternative Intersections

Interchanges and Alternative Intersections

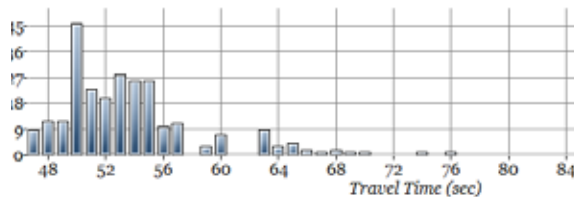
Interchange Intersection
 Interchange Type: Diamond
 Diverging Diamond

Alternative Intersection
 Intersection Type:
 Upstream
 MUT
 MUT with TWSC
 RCUT
 DLT
 DCD/DDI

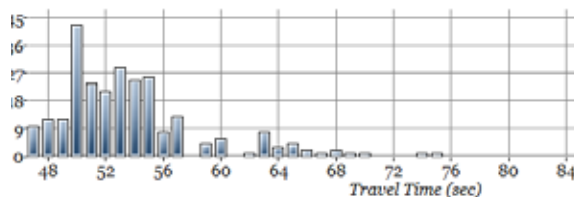
MULTIMODAL INPUT DATA

Signal One Information																	
Cycle, s	65.0																
Offset, s	45																
Uncoordinated	No	Green	18.9	36.1	0.0	0.0	0.0	0.0									
Force Mode	Fixed	Yellow	4.0	4.0	0.0	0.0	0.0	0.0									
		Red	1.0	1.0	0.0	0.0	0.0	0.0									
Signal Two Information																	
Cycle, s	65.0																
Offset, s	0																
Uncoordinated	No	Green	17.0	11.7	4.8	16.4	0.0	0.0									
Force Mode	Fixed	Yellow	4.0	4.0	0.0	4.0	0.0	0.0									
		Red	1.0	1.0	0.0	1.0	0.0	0.0									
Signal Three Information																	
Cycle, s	65.0																
Offset, s	45																
Uncoordinated	No	Green	12.8	42.2	0.0	0.0	0.0	0.0									
Force Mode	Fixed	Yellow	4.0	4.0	0.0	0.0	0.0	0.0									
		Red	1.0	1.0	0.0	0.0	0.0	0.0									
Overall Results		EB1		WB1		EB2		WB2		NB2		SB2		EB3		WB3	
Approach Delay, s/veh		10.8		4.1		42.2		29.5		21.6		24.6		2.5		11.0	
Approach LOS		B		A		D		C		C		C		A		B	
Intersection ETT, s/veh / LOS				28.6								C					

Travel Time Frequency Distribution EB



Travel Time Frequency Distribution WB



Travel Time Reliability

Analysis

Reporting Period: Start Date: 1/1/2011, End Date: 1/1/2012

Mon Tue Wed Thu Fri Sat Sun

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Total of 260 days have been selected from 1/1/2011 to 1/1/2012 including only weekdays.

Study Period:
 Start Time: 07:00
 End Time: 07:15
 Duration: 00:15

Analysis Summary:
 Total number of analysis days: 260
 Number of datasets per day: 1
 Number of standard datasets: 260
 Total Number of datasets: 260