

MARCH NEWS HCS2022 HIGHLIGHTED FEATURES

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The HCS 2022 is out!



This latest release implements methods of the recently published 7th Edition of the Highway Capacity Manual (2022), metric units support, and a redesigned user interface for an enhanced user experience.

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Network Analysis - New HCM Methods to Evaluate Freeway-Streets Corridors

Dr. Fabio Sasahara



The Highway Capacity Manual (HCM) is a very effective tool to evaluate the quality of service for different transportation elements such as freeways, highways, intersections, urban streets, and interchanges. However, the HCM lacked a methodology for evaluating networks comprised of multiple elements, such as freeway-urban street interactions. A new method to address this issue was developed on the research project NCHRP 15-57: Highway Capacity Manual Methodologies for Corridors Involving Freeways and Surface Streets, led by University of Florida researchers.

The results of this report were incorporated into the HCM 7th Edition as a new *Chapter 38: Network Analysis*. This article highlights the major features of this new methodology being added to the Highway Capacity Manual in 2022.

Common performance measure: Travel Time

The evaluation of the quality of service for trips over different facility types required moving from segmentbased performance measures to Origin-Destination (OD) measures.

Travel Time between OD pairs was established as the common performance measure to evaluate systems with freeways and urban streets. This measure is already used in the HCM to analyze urban streets, but additional modifications were required to adapt the methods for freeways, such as implementing models for lane-by-lane analyses.

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Participate in ACP80's Survey



The TRB Standing Committee on Traffic Simulation (ACP80) is conducting a survey to better understand the current uses and common challenges of traffic simulation. It aims to identify: (1) the primary uses of traffic simulation, (2) analyzed applications, and (3) corresponding user needs.

The committee will use the results (collected and compiled anonymously) to guide future research and initiatives aimed at addressing the identified challenges. We kindly request those that utilize traffic simulation to complete the survey:

Link to Survey

TIPS & HINTS

Major Weave

In freeway analysis, diverge segments with an option lane and no clear deceleration lanes may be considered major Diverge areas. Major Diverge areas are a special case covered by the 7th edition of HCM (HCM2022) Chapter 14 methodology.



The HCS2022 module, Freeways, incorporates this option. Besides leaving the deceleration lane length equal to zero, the option "Major Diverge" is checked. This will result in a modified density at the ramp influence area.



STAFF SPOTLIGHT

Kyle Arola

Information Technology Specialist

Doing life differently has always been my style. From racing dirt track cars in Alaska to guiding hunting trips horseback in the Rocky Mountains, the one constant in my life is that I have kept moving. Having finally settled in Gainesville, Florida, I find that my life has not slowed, even a little!

Working at the University of Florida in the information technology field has allowed me to interact with some of the greatest researchers in the world, and one such group I support is the McTrans Center. Navigating the tunnels of bureaucracy at the University can be challenging, and one of the aspects of my work I enjoy the most is helping groups successfully navigate these dark places. Some may scoff at my happy countenance as I review the endless policies, planning on how to use them to our advantage in our work; but the relief our researchers feel when a project is launched, and they can begin work, is the reason I enjoy this so much. I may never slow down, but with the McTrans group "paving the way", I am looking forward to a smooth ride for years to come!

UF Transportation Institute McTrans

UPCOMING VIRTUAL TRAINING

What's New in the 7th Edition of HCM?

Applicable for 1.5 PDHs

Apr 07, 2022	3 - 4:30 PM ET
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Applicable for **12 PDHs Jun** 01 - 15, 2022 10 AM - 2 PM ET

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