McTrans™ Moving Technology
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Interoperability of ARTPLAN 2008, TRANSYT-7F™ and TSIS-CORSIM™

Enhanced ARTPLAN Provides Lightning-Fast Access to Arterial Optimization and Animation

ARTPLAN 2008

ARTPLAN 2008, developed by Dr. Scott Washburn (University of Florida) with assistance from the Florida Department of Transportation, has been substantially enhanced beyond older versions of ARTPLAN.

Distributed together with the Highway Capacity Software™ and TRANSYT-7F (*HCS+T7F*™), ARTPLAN began as an arterial planning application, similar to the *HCS+*Arterials planning module.

Recent expansions to the ARTPLAN model now have the developers joking that their analyses may become more detailed than the current Highway Capacity Manual (HCM) operational procedures.

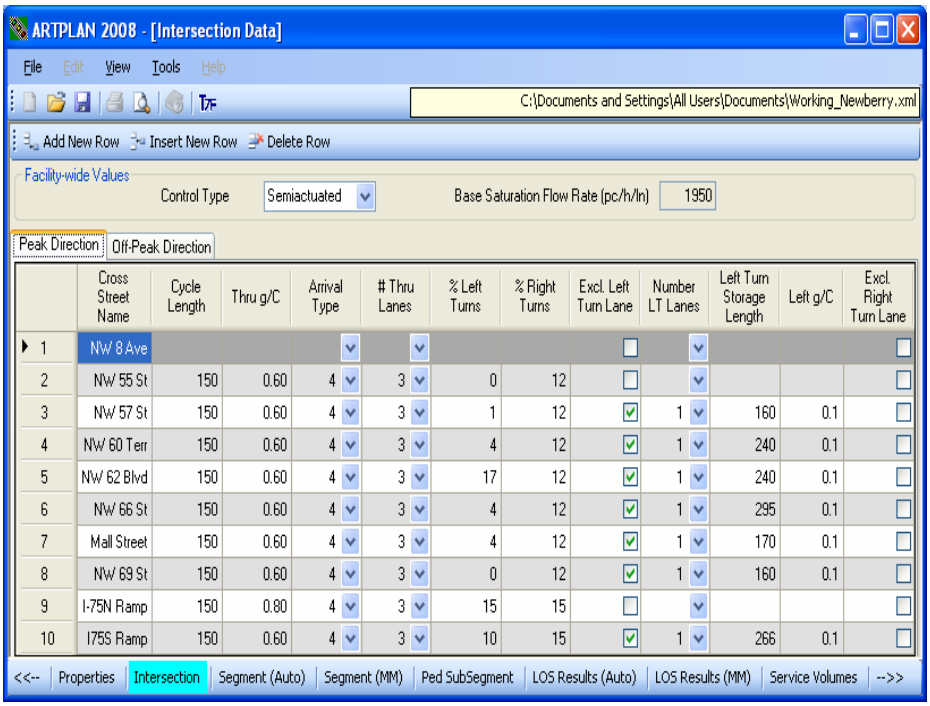
But the efficiency and simplicity of ARTPLAN data entry have remained intact, and new software integration provided by Mc*Trans* will provide perhaps the fastest-ever access to arterial optimization and animation.

Clicking on the "T7F" button synthesizes a TRANSYT-7F dataset, automatically loading the new data into the TRANSYT-7F user-interface. From there, the user has instant access to optimization, time-space diagrams, one-touch *HCS+*Signals analysis, and one-touch CORSIM animation (TSIS-CORSIM is sold separately).

Instead of tediously coding the detailed data for each intersection, it is only necessary to complete simple forms such as the one illustrated in the screen shot shown here.

Once inside TRANSYT-7F, volumes and timing plans can be further customized if needed. This means that ARTPLAN becomes a real time-saver for the traffic operations engineer. For planners, they now have easy access to the extensive information and capabilities provided by TRANSYT, CORSIM and *HCS+*Signals.

ARTPLAN is planned for distribution as part of the next version of *HCS+T7F*, scheduled for release this fall. More on what's coming with updates to *HCS+*, TRANSYT-7F and TSIS-CORSIM this fall can be found on the next page.



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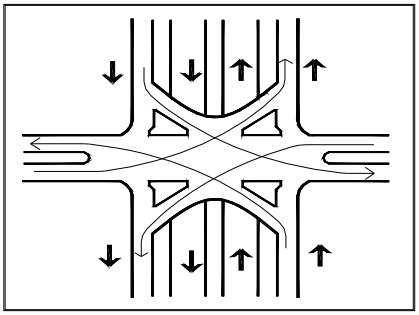
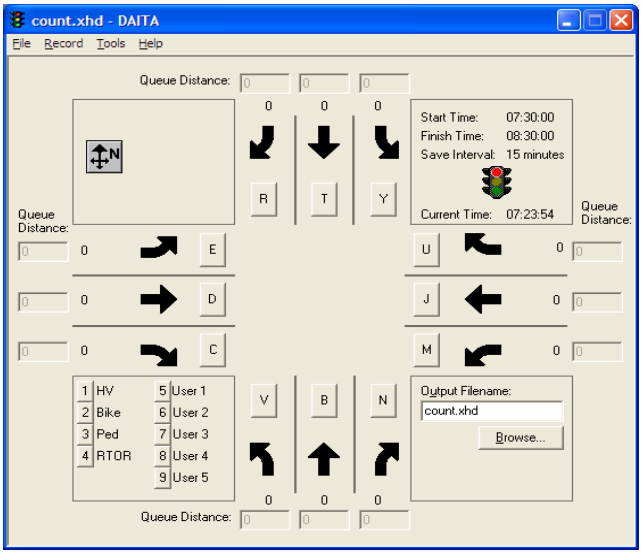
HCS+ 5.4 Upgrades Interchanges and DAITA

Interchanges

The latest version (5.4) of *HCS+*™ will include an additional interchange type within the new *HCS+*Interchanges module. The first release of this tool included diamond interchanges and six partial cloverleaf designs, all operating with two signals at the bases of the ramps. The Single-Point Urban Interchange (SPUI) is unique in that the ramp intersections are controlled with one signal as shown in the figure here.





DAITA

HCS+ version 5.4 will also provide enhanced features within the DAITA turning movement data collection tool. In an effort to provide efficient capability for gathering true demand data for signalized intersections, an automated mechanism has been implemented to allow the coding of unmet demand queue lengths at the end of each analysis (typically 15-minute) period as shown here. These distances are converted to vehicles and added to the stop-bar counts for that period with unmet demand turning movements estimated using the stop-bar proportions from that period. The final demand data can be imported directly into *HCS+*Signals for a multiple-period analysis that is most appropriate in congested conditions.

New Releases of *HCS+*, TRANSYT-7F and TSIS-CORSIM Planned for this Fall

Targeted for public release by Mc*Trans* this fall are TSIS-CORSIM 6.1, featuring left-hand drive and 9-lane intersection approaches; TRANSYT-7F release 11.3, offering one-touch CORSIM animation for left-hand networks and HTML-based electronic Help systems and users guides; *HCS+* version 5.4 (see article for details), including the addition of Single-Point Urban Interchange analysis to the Interchanges module, detailed demand data collection within the DAITA tool, and ARTPLAN 2008, offering integration with CORSIM and TRANSYT-7F (see article for details); and HTML-based electronic Help systems and users guides.

2010 Highway Capacity Manual (HCM) being Developed

The National Cooperative Highway Research Program (NCHRP) is funding the development of the 2010 HCM for this major Transportation Research Board (TRB) publication. The contract is being led by Kittelson & Associates, Inc. with strong support from the University of Florida, Polytechnic University, and the Texas Transportation Institute. The team has been well underway for over a year now and making great progress and providing very close coordination with the Highway Capacity and Quality of Service (HCQS) committee. Plans include distribution in four volumes (Concepts, Uninterrupted Flow, Interrupted Flow and Applications Guide) with major upgrades to the Urban Streets (Facilities and Segments), Weaving and Roundabout procedures, including more complete guidance on the use of simulation. The HCQS committee is looking for volunteers now to review draft material as it becomes available. Please contact the Chair, Rick Dowling, at rdowling@dowlinginc.com with your relevant qualifications if you would like to participate. More details on the 2010 HCM will be forthcoming as development continues.

Update Watch

Package	Version	Status	Target	Distribution
HCS+	**5.4**	**Testing**	**October**	**Patch Download**
TRANSYT-7F	**11.3**	**Testing**	**October**	**Patch Download**
TSIS-CORSIM	**6.1**	**Testing**	**October**	**Patch Download**
DYNASMART-P	**1.3.0**	**Complete**	**Available**	**Sent to Registered Users**
IDAS	**2.3**	**Complete**	**Available**	**Sent to Registered Users**
QuickZone	**2.0**	**Complete**	**Available**	**Sent to Registered Users**
TNM	**2.5**	**Complete**	**Available**	**Sent to Registered Users**