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## Mcbyte

There are 14 new products reviewed on Pages 4, 5 & 6: ARTS Compendium from US DOT; BOSS RiverCad, EPANET Modeling System, River Modeling System, Surfacewater Modeling System, Watershed Modeling System and WSPSRO for Windows, all from BOSS International; CBEAR and Reinforced Slope Stability from FHWA; CCG/CALC2 and TRANMAP from BA Consulting Group; PIZER EARTH by PIZER, Inc.; PREPASSR, PRETRANSYT & PRENETSIM, now as Windows-based programs from Strong Concepts; and TRAFFIX™ by Dowling Associates. Please note important announcements on Page 7. Coming events and training are on the last page.



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is on  
the Web.**



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# TRC celebrates 25 years

McTrans' parent, Transportation Research Center (TRC) at the University of Florida was "born" October 29, 1972. This October marks its 25<sup>th</sup> year of service to the state, nation and world. The TRC has been recognized for its contributions to transportation research – principally in traffic operations, transportation planning, safety and now intelligent transportation systems. Its faculty and staff are very active members of numerous national organizations such as the Institute of Transportation Engineers, (national and Florida Section), ITS America and *ITS Florida*, International Road Federation and Transportation Research Board, to name a few.

The TRC operates *McTrans* and the Florida Transportation Technology Transfer Center, which includes the Local Technical Assistance Program, Traffic Safety Program and the Rural Technical Assistance Program.

We look forward to working with you for years to come.

The major emphasis this year at *McTrans* has been software development. The Highway Capacity Software for Windows 95/NT (HCS-3) is being rebuilt from the ground up as a pure Windows application utilizing state-of-the-art tools. The new version also will incorporate procedures contained in the 1997 Update to the Highway Capacity Manual (HCM). We are planning to release HCS-3 concurrently with the publication of the updated HCM, scheduled for publication in January. Release 8 of TRANSYT-7F is nearing completion, incorporating new features discussed on the following page. It is being tested and scheduled for release in December.

Another milestone this year was the release of the Traffic Software Integrated System (TSIS) from the Federal highway Administration. TSIS contains the CORSIM model which has replaced the TRAF-NETSIM and FRESIM simulation tools previously offered. CORSIM allows the microscopic simulation of an integrated system of freeways and arterial surface streets.

Over the past year, our web site continues to expand, now with the current catalog (1998) and newsletter (Fall, 1997) in PDF (portable document format) for easy viewing. A history of over two years of newsletters can also be viewed on the web site, those since September, 1996, in PDF. An online order form is in the works and plans are being made to automate several services for electronic actions over the next year.

We have continued our efforts to make more update information and technical assistance available on our web site. The latest HCS patch (d) was made available last year and over 80% of the over 2,500 users receiving the patch did so electronically. The announcement of the TSIS package was on the web site, including the press release describing the program's capabilities and pricing, before the printed version was distributed. Indeed, this newsletter has been available on the web site since November 20th, probably weeks before you received your copy.

In our efforts to meet users face-to-face, *McTrans* participated in the ITE Annual Meeting in Minneapolis, the Third ITS World Congress in Orlando, and the TRB Annual Meeting in Washington, DC, as well as the ITE Mid-Year International Conference in Tampa, the Highway Capacity Committee Mid-Year Meeting in Orlando and the Florida ASCE meeting in Clearwater.

This next year we plan to vigorously review the 465 products we currently offer and broaden and refresh our offering of transportation software in all categories. We also plan to take further advantage of the web to make product information and ordering easier for our members. If you have any recommendations on how we can better serve you, please give us a call or e-mail us. As always, we appreciate your involvement and support.

## HCS-3 for Windows95/NT is under development

TRANSYT-7F (TRAffic Network StudY Tool, version 7F) is the most popular program for network traffic signal timing design and analysis. The original TRANSYT model was developed by the (now) Transport Research Laboratory, Inc., in the United Kingdom. TRANSYT, version 7 was "Americanized" for the Federal Highway Administration (FHWA) in 1981 by the University of Florida Transportation

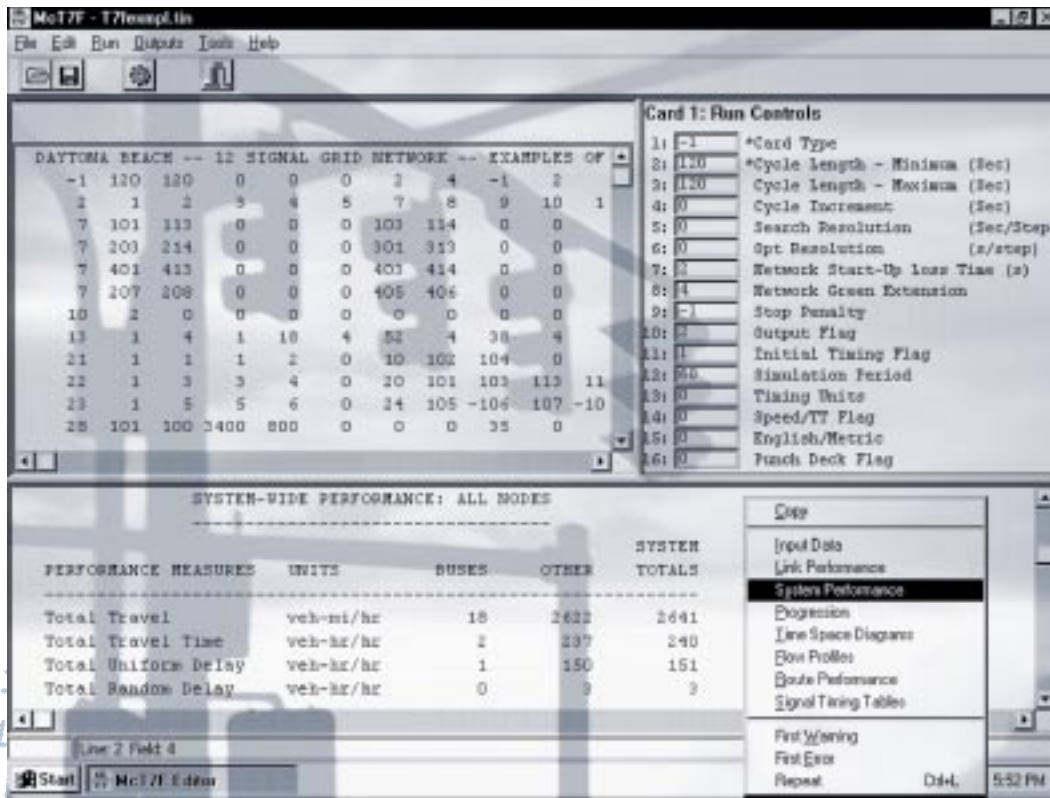
Research Center (TRC). Since this original issue, a number of improvements have been made over the years. The current release is number 7, which was distributed in 1992.

Under a contract to FHWA through PB Farradyne Inc., the TRC has drastically improved the program. This update, which results in release 8, reflects a number of significant improvements, including

- **Explicit modeling of saturated and spillback conditions:** In release 7, the simulation begins at a specific network link, completes all time steps for the link, then proceeds to the next link until every link in the network is processed. This simulation approach cannot adequately model the spillback situations of congested networks, because spillbacks from the downstream link are not updated regularly to enable the simulation of the upstream link to account for the spillback effects. Release 8 overcomes this shortcoming by proceeding through all links for every time step until all time steps are processed. In other words, the traffic conditions of the entire network are updated every time step. This not only allows for the modeling of spillback effects from saturated conditions, it also allows for the modeling of effects that occur across multiple cycles, the use of different cycle lengths among intersections and the elimination of the need for multiple simulations of permitted movements.

- **Use of horizontal queue:** Previous TRANSYT models assume queues were stacked "vertically," which is clearly not consistent with real-world situations. In release 8 queues are built "horizontally."

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## New Windows 95/NT version of McT7F planned

As part of the upgrade of TRANSYT-7F to Release 8, McTrans has contracted with Dr. John Leonard of the Georgia Institute of Technology to develop a completely updated Windows95/NT version of McT7F. The new version of McT7F provides all the functionality expected of a Win95/NT program: the OS recognizes the McT7F file types, displays unique McT7F file icons, and promotes a "folder" orientation to data file management. The new version of McT7F also introduces features not found in other program interfaces: it presents the TRANSYT-7F input and output files within a single window, allowing the engineer to review the outputs of the last TRANSYT-7F run while making changes to the input data file. The new interface also presents the contents of the current record as individual fields with the appropriate record type description. In all, the new interface is a welcome upgrade, and will certainly increase productivity of engineering using TRANSYT-7F.

## ARTS Compendium

The Advanced Rural Transportation Systems (ARTS) Compendium is a comprehensive listing of technology-based projects that have been or could be implemented in rural areas. It is a useful tool for anyone interested in planning or implementing intelligent transportation systems (ITS) projects in rural areas by assisting with research on what has been done to meet a particular need or provide a particular service. The compendium consists of a variety of project types, from planning studies to federally-funded field operational tests. Users can browse, sort, and search the database to identify projects of interest.

**ARTS Compendium (#ARTS) by US DOT is available at LOS 4 for \$5. The ARTS document (#ARTS.D) is available for \$10.**

## BOSS RiverCAD

BOSS RiverCAD™ incorporates all of the advanced technology that was developed for our RMS™ for AutoCAD product, without requiring AutoCAD. There is no other river modeling software package with this much power. BOSS RiverCAD is a completely self-contained package, providing complete support for both the U.S. Army Corps of Engineers HEC-2 and HEC-RAS numerical flow analysis engines models—allowing the engineer to instantly switch back and forth between these two analysis engines. BOSS RiverCAD computes water surface profiles for modeling bridges, culverts, spillways, levees, bridge scour, floodway delineations, floodplain reclamations, stream diversions, channel improvements, and split flows.

BOSS RiverCAD is integrated with its own 3D CAD system that is 100% compatible with AutoCAD and MicroStation. BOSS RiverCAD's graphical capabilities are extremely advanced, allowing 4 individual CAD drawings to be opened simultaneously—with each drawing having 4 separate viewpoints displayed. BOSS RiverCAD's cross-section and profile plots can be output at any drawing scale. In addition, scanned TIFF or BMP aerial images or maps can be displayed as a background image, allowing the user to quickly digitize cross-sections, confirm the graphical analysis results, or simply enhance the outputted topo map

modeling results. Included with BOSS RiverCAD is a sophisticated 3D surface renderer, allowing you to quickly create professional 3D shaded plots of the river reach being studied.

Like all BOSS International products, BOSS RiverCAD includes free lifetime technical support..

**BOSS RiverCAD (#BOSSRCAD.W95) by BOSS International is available at LOS 7. Price for a complete package is \$2,690. Call McTrans for prices of modules.**

## CBEAR

CBEAR analyzes the bearing capacity of shallow foundations. CBEAR can analyze strip, rectangular and square footings. It also considers the effects of embedment, inclined and eccentric loads, sloping ground surface and surcharge. The program incorporates the general bearing capacity equations and factors suggested by Meyerhopf (1963) and Vesic (1975). This program uses the MS DOS operating system.

**CBEAR (#CBEAR) by FHWA is available at LOS 5 for \$5. The documentation (#CBEAR.DOC) is available for \$10.**

## CCG/CALC2

CCG/CALC 2 is a signalized intersection analysis package based on the methodology documented in the ITE's Canadian Capacity Guide for Signalized Intersections, 2nd edition (1995). This easy to use package offers full control over analysis assumptions, and provides a complete set of performance measures on a lane by lane basis, as well as for the overall intersection. These include Flow Ratios, Volume/Capacity

Ratios, Delays, Queues, and Environmental Measures such as fuel consumption and emissions. Sophisticated features include automatic phase identification and adjustment of lost time and effective green on a lane by lane basis, and automatic balancing of any demand volume scenario across any combination of exclusive and shared lanes, and through any phasing pattern, on each approach of the intersection.

The package can be used by itself, or in combination with TRANMAP, whereupon it becomes part of a highly productive analytic environment, facilitating the site traffic impact assessment process from trip gen-

eration to signalized intersection analysis.

**CCG/CALC2 (#CALC2) by BA Consulting Group, Ltd. is available at LOS 7 for \$225.**

## EPANET Modeling System

EMS is the most advanced powerful, and comprehensive water distribution modeling package available. EMS can analyze an entire water distribution system, or selected portions, under steady-state and extended period simulations, with water quality analysis if needed.

EMS has extensive modeling capabilities. The program supports any network configuration and multiple demand categories. EMS can very efficiently handle large models and complex multiple pressure zones for any hydraulic condition. EMS will track the flow and velocity of water in each pipe, the pressure and grade at each node, the height of water in each tank, and the movement and fate of water quality constituents throughout the entire network during an extended period simulation.

Like all BOSS International products, EMS includes free lifetime technical support.

**EPANET Modeling System (#EPANETMS.W95) by BOSS International is available at LOS 7. The program is priced by the number of pipes, call McTrans for quote. A documentation manual is also included.**

## PIZER EARTH Earthwork Cut and Fill Calculator Version 5.0

PIZER EARTH is a powerful and flexible earthwork cut and fill calculator for Windows 95/NT. EARTH determines volumetric quantities, for roadways, borrow pits, trench excavations, parking lots, retaining walls, etc. using either the Average End Area Method or a modified Prismatic Method. EARTH is a stand-alone application that integrates with industry-standard CAD programs.

EARTH takes your cross-section data for existing and proposed ground levels and calculates the volume of earth to be removed and added. Cross-sections and profiles are plotted graphically. Station and local quantities calculated include volume, catch points, elevation, and mass. A variety of output options are available using cut and past features and integration with AutoDesk's AutoCAD as

well as other CAD programs which use the DXF file format.

PIZER EARTH has been a standard of the Federal Highway Administration for over 10 years. File formats are the same between versions 4 and 5 of EARTH, allowing you to easily exchange files without conversion.

**PIZER EARTH (#PEARTH.W95) by PIZER, Inc. is available at LOS 7 for \$500. There is a 40% academic discount.**

### PREPASSR, PRETRANSYT and PRENETSIM

The popular preprocessors PREPASSR, PRETRANSYT and PRENETSIM have recently been released by Strong Concepts as new Windows-based programs. Like their DOS predecessors (which will continue to be maintained and developed) PREPASSR/TEAPAC for Windows exports the standardized TEAPAC input data to a PASSER-II simulation or optimization; PRETRANSYT/TEAPAC for Windows exports the same data to a TRANSYT-7F simulation or optimization; and PRENETSIM/TEAPAC for Windows exports the data to NETSIM or CORSIM for simulation or animation. WinPREPASSR and WinPRETRANSYT will also import the optimized results from the host programs, and all programs share data amongst themselves, as needed, so PASSER's timings can be used as starting timings for TRANSYT and all optimized timings can be simulated with NETSIM or CORSIM. All programs also read SIGNAL94/TEAPAC data files (from either Windows or DOS) so that SIGNAL94 can be used for complete phasing and timing optimization based on a faithful implementation of the 1994 Highway Capacity Manual Chapter 9 procedures. These phasings and/or timings can then be used to constrain the PASSER and/or TRANSYT optimizations and the computed saturation flow rates can be used by all of the three models. The new programs can also get their turning count data from other TEAPAC programs like SITE, TURNS and WARRANTS for multi-time-period analysis of existing and projected conditions, all based on a single data base of information.

PREPASSR, PRETRANSYT and PRENETSIM are now available for several Windows platforms. The Windows versions have all of the features

noted above (found in the DOS versions), plus a unique Visual Mode like WinSIGNAL94 which provides an intuitive, graphical user interface as a true Windows program. These versions also provide a complete and fully-indexed on-line user guide and context-sensitive help. Data files are fully interchangeable with the DOS versions of the same programs, as well as with all the other TEAPAC programs, either DOS or Windows. The .WIN versions will run on any of the Windows 3.x or Windows 95 platforms; the .W95 versions will run on any of the Windows 95 or Windows NT platforms.

**The 12-intersection version of PREPASSR/TEAPAC Ver 1.50 from Strong Concepts (#TPCPPS.1, #TPCPPS.1.WIN and #TPCPPS.1.W95) is available at LOS 7 from McTrans for \$395. The 100-intersection version of PREPASSR/TEAPAC with sub-system capabilities (#TPCPPS.2, #TPCPPS.2.WIN and #TPCPPS.2.W95) is available at LOS 7 for \$595.**

**The 12-intersection version of PRETRANSYT/TEAPAC Ver 2.60 from Strong Concepts (#TPCPTR.1, #TPCPTR.1.WIN and #TPCPTR.1.W95) is available at LOS 7 from McTrans for \$495. The 100-intersection version of PRETRANSYT/TEAPAC with sub-system capabilities (#TPCPTR.2, #TPCPTR.2.WIN and #TPCPTR.2.W95) is available at LOS 7 for \$695.**

**The 12-intersection version of PRENETSIM/TEAPAC Ver 1.20 from Strong Concepts (#TPCPNT.1, #TPCPNT.1.WIN and #TPCPNT.1.W95) is available at LOS 7 from McTrans for \$495. The 100-intersection version of PRENETSIM/TEAPAC with sub-system capabilities (#TPCPNT.2, #TPCPNT.2.WIN and #TPCPNT.2.W95) is available at LOS 7 for \$695.**

**Educational versions are available for half price and demonstration versions are available for \$5 (#TPCPPS.0, #TPCPPS.0.WIN, #TPCPPS.0.W95, #TPCPTR.0, #TPCPTR.0.WIN, #TPCPTR.0.W95, #TPCPNT.0, #TPCPNT.0.WIN, #TPCPNT.0.W95). Registered licensees of DOS versions of PREPASSR, PRETRANSYT and PRENETSIM may upgrade to a Windows version at a reduced fee directly from Strong Concepts.**

### Reinforced Slope Stability

RSS analyzes and designs soil slopes strengthened with horizontal reinforcement, as well as analyzing unreinforced soil slopes. The analysis is performed using a two dimensional limit equilibrium method. The program uses an extensively modified version of the STABL computer program and guidelines for design of soil reinforcements as stated in Elias and Christopher (1996) and Christopher et al. (1988 and 1990). This program uses the MS DOS operating system.

**Reinforced Slope Stability (#RSS) by FHWA is available at LOS 5 for \$5. The documentation (#RSS.D) is available for \$10.**

### River Modeling System

RMS for AutoCAD brings the power of AutoCAD to computing water surface profiles for modeling bridges, bridge scour, culverts, weirs, spillways, levees, floodway delineations, floodplain reclamations, stream diversions, channel improvements, and split flows. RMS for AutoCAD is completely graphical and provides support for both the U.S. Army Corps of Engineers HEC-2 and HEC-RAS water surface profile models.

RMS allows you to quickly define a model, analyze it, and display its results without ever leaving the AutoCAD environment. Models can be analyzed bi-directionally, where HEC-2 models can also be analyzed with HEC-RAS, and visa versa. In addition, RMS has been written in an open-architecture application, allowing it to interface with other water surface profile analysis models, including DAMBRK, SWMM, UNET, FLDWAVE, MIKE 11, HEC-6, WSP2, and WSPRO.

Like all BOSS International products, RMS includes free lifetime technical support.

**River Modeling System (#BOSSRMS.W95) by BOSS International is available at LOS 7. Price for a complete package is \$2,290. Call McTrans for prices of modules**

### Surfacewater Modeling System

SMS is the most advanced powerful, and comprehensive two-dimensional surfacewater modeling package available. The software models the water surface elevation, flow, velocity, contaminant transport and dispersion, and sediment transport and

deposition for complex two-dimensional horizontal flow problems.

SMS provides complete support for the U.S. Army Corps of Engineers RMA two-dimensional hydrodynamic and hydrodynamic transport, SED-2D two-dimensional sediment transport and deposition, HVEL-2D two-dimensional hydrodynamic supercritical and subcritical flow, and the U.S. Federal Highway Administration FESWMS two-dimensional hydrodynamic and bridge scour finite element models.

Like all BOSS International products, SMS includes free lifetime technical support.

**Surfacewater Modeling System (#BOSSSMS.W95) by BOSS International is available at LOS 7. Price for a complete package is \$1,675. Call McTrans for prices of modules.**

### TRAFFIX™

TRAFFIX 7.0 for Windows95 was released September 1, 1997. TRAFFIX 7.0 for Windows95 is a Traffic Impact Analysis program that aids in the analysis of impacts of new development and the analysis of intersection and segment Level Of Service (LOS). The program runs on the Windows95/Windows NT platforms with many improved, user-friendly features over the previous MS-DOS version. Major uses of TRAFFIX include:

1. Rapidly forecast traffic impact of new developments.
2. Analyze as many as 1000 intersections in a single run.
3. LOS for signalized and unsignalized intersections.
4. Arterial LOS analysis (HCM Chapter 11).
5. User choice of LOS methods: 1985 HCM, 1994 HCM, Taiwan HCM, 1997 HCM (coming soon), Circular 212 and ICU.
6. Interactively test mitigation measures.
7. Compute traffic impact fee for individual projects.

The new features of TRAFFIX 7.0 for Windows95 include:

1. New graphical user interface.
2. New network draw capabilities.
3. New scenarios analysis features aid project evaluation and data management.

[more→](#)

4. All data and scenarios stored in a single database.
5. On-line help.
6. Read and write TRAFFIX-for-DOS files.
7. Backward compatibility with MS-DOS version.

Dowling Associates, Inc., a transportation consulting firm in California, has developed and maintained the TRAFFIX program since 1987.

**TRAFFIX (#TRAFFIX) by Dowling Associates, Inc. is available at LOS 7 for \$1840.**

## TRANMAP

TRANMAP is a suite of tools providing traffic engineers with a productive analytical environment for performing Site Traffic Impact analysis using the same tried and true procedures followed during the course of a manual assignment based analysis procedure. The program supports Trip Generation and Distribution, Network and Route definition, Trip Assignment, Background Traffic definition, and Total Volume calculations. When used in combination with CCG/CALC 2, Signalized Intersection Analysis is also fully supported. Storage of data at each stage of the analysis allows alternative sets of assumptions to be easily assembled to create analytic scenarios. A built in project manager provides control over these multiple analysis scenarios. Eliminating the trivial and time consuming arithmetic involved in manually adding up the components of assigned traffic allows the analyst to concentrate on ensuring the soundness of assumptions and interpretation of results.

**TRANMAP (#TRANMAP) by BA Consulting Group, Ltd. is available at LOS 7 for \$900.**

## Watershed Modeling System

WMS is the most advanced, powerful, and comprehensive hydrology modeling package available. Both rural and urban catchment basins can be easily modeled.

WMS provides complete support of the industry-standard U.S. Army Corps of Engineers HEC-1, U.S. Soil Conservation Service TR-20, and Rational Method Equation hydrologic routing programs. Also supported is the recently released state-of-the-art National Flood Frequency (NFF) model, jointly developed by the Federal Highway Administration and the USGS.

The provided DTM and Map Modules allow WMS to build a digital terrain model of the watershed. The program will then automatically subdivide a large watershed into a series of sub-basins, precisely delineate the sub-basin boundaries, compute the resulting stream channel network, determine the required hydrologic properties, and construct the corresponding hydrology model input data file—all in just a few minutes.

Like all BOSS International products, WMS includes free lifetime technical support.

**WSPRO for Windows (#BOSSWMS.W95) by BOSS International is available at LOS 7. The price for a complete package is \$1,695. Call McTrans for prices of modules.**

## WSPRO for Windows

WSPRO for Windows is the most powerful, easy-to-use water-surface profile software available for the design and analysis of bridge waterways. WSPRO is easy to learn and use. Data input is performed graphi-

cally through easy-to-use dialog boxes, enabling you to easily enter or change input data. There is no longer any need to struggle with cumbersome, cryptic, error-prone data input card files.

WSPRO for Windows displays several graphs, including single cross-section plots, overlaid multiple cross-section plots, water surface profile plots, and overlaid profile summary plots, allowing you to quickly evaluate your work. All graphics can be output to any laser printer or other output device using Microsoft Windows. In addition, the graphics can be copied to the Microsoft Windows clipboard, allowing the cross-section plots and profile plots to be pasted into Microsoft Word and other Windows applications.

Bridge openings can be defined by either horizontal station and ground elevation coordinates (for existing bridges or fixed-geometry design conditions), or in terms of geometric bridge components which are then used to build the bridge cross-section (allowing several alternative bridge designs to be quickly analyzed). The program can model multiple waterway openings (including culverts), and will consider the effects of support columns, spur dikes, variable flow lengths, and lateral tributary flow gains and losses.

Like all BOSS International products, WSPRO for Windows includes free lifetime technical support.

**WSPRO for Windows (#BOSSWSPR.W95) by BOSS International is available at LOS 7 for \$495.**



Package	Version	Status	Target	Distribution
HCS	2.1e	Complete	Available	Patch File
HCS-3	3.1	Under development	January	Registered users may upgrade
TRANSYT-7F	8.1	Testing	December	Registered users may upgrade
TSIS (Corsim)		Complete	Available	Registered users may upgrade

## McTrans to Host Workshop on Traffic Software

The Institute of Transportation Engineers (ITE), Federal Highway Administration (FHWA) and McTrans will be cosponsoring a specialty workshop on traffic software. The workshop is actually a meeting of ITE's Transportation Software Developers' Task Force, which was formed in April 1996. The purposes of the workshop are:

- Review the technical content and formality of the Traffic Software Data Dictionary presently being developed for FHWA by Kaman Sciences Corp. The TSDD is proposed as a potential data standard for traffic model software, and the workshop will further explore whether TSDD should indeed be a formal ITE standard, or an informal one.
- Explore the current and future relationships of the Traffic Software Integrated System (TSIS) as a computing platform for traffic models and its database as a repository of modeling data, with the wide range of publicly available traffic models.

Since this is a task force meeting, it is by invitation, but we welcome others to express an interest in coming. If you are interested in an invitation, please contact Charles Wallace at McTrans.

**Dates:** December 10-12, 1997

**Location:** TradeWinds Resort, St. Petersburg Beach, FL

**Registration:** \$75

**Information:**

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## 77th Annual Meeting

### Transportation Research Board



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TRB Annual Meeting Information Line: 202.334.3472

This enables intra-link travel time, spillback, stops and queue delay to be estimated more accurately.

• **Multi-cycle and multi-period:** Simulation has always been performed on a single cycle; thus the effects of traffic conditions from one cycle to another was not explicitly modeled. In release 8, simulation may be based on multiple cycles, allowing the effects between cycles to be modeled explicitly. Release 8 also allows multiple time-period inputs for timing, saturation flow and volume data.

• **Optimization under congested conditions:** The single-cycle optimization for the previous releases was appropriate for undersaturated conditions but not for saturated conditions. Release 8 includes new strategies for timing under saturated conditions.

A number of minor but important features have also been incorporated into release 8, including,

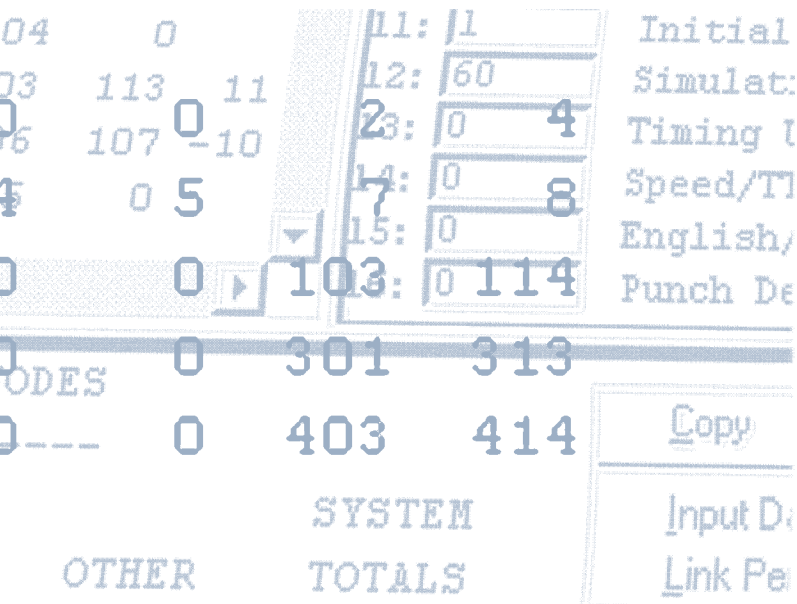
- increased maximum number of time steps allowed to permit optimization to 1-sec resolution,
- non-integer lost times and change periods,

- a random-plus-saturation term for stops, and
- level of service (LOS) added as an explicit output.

A completely new Windows 95/NT interface for release 8 has been developed for the TRC by Dr. John Leonard. This interface functionally replaces McT7F and T7FDIM (input editor) that came with release 7. (The DOS version of McT7F and T7FDIM will continue to be available for release 8, however.)

There are several new record types, but the input file structure of release 8 is entirely upward compatible. The new T7FDIM for both the DOS and the Windows 95/NT versions will load input files created for and by the previous release.

Release 8 is being beta tested and is scheduled for public distribution in late 1997. As usual, McTrans will announce its availability to all registered TRANSYT-7F users. Others also can check the McTrans web site at: <http://mctrans.ce.ufl.edu/>.



# McTrans Newsletter

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