

Strong Concepts Newsletter

Introducing TEAPAC Complete 2010 Version 8.5

2010 Highway Capacity Manual

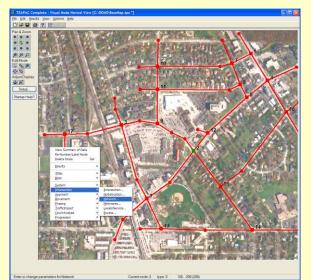
Capacity Analysis and Optimization for Signalized Intersections

> Actuated or Pretimed Coordinated or Isolated

Fully Integrated with 15 TEAPAC Program Functions Together in One Program

Low Pricing for Single User/Computer Licenses

Software Maintenance Plan Eliminates Update/Upgrade Fees Forever



Visit the main page at StrongConcepts.com for more detailed color screen-shots of TEAPAC Complete 2010

InfoQueue

Volume 20, Number 1

April, 2011

TEAPAC *Complete* 2010, Version 8.5

TEAPAC *Complete* 2010 (Version 8.5) has been released, incorporating the actuated methodology of the new 2010 *Highway Capacity Manual* (HCM), as follows -

- The first commercial software available for HCM 2010. The 2010 HCM was published by TRB in April, 2011 - Ver 8.50 was released concurrently.
- Fully functional, HCM-compliant capacity analysis for <u>both</u> HCM 2000 <u>and</u> HCM 2010.
 HCM actuated, HCM LOS, HCM delay, HCM queue, HCM satflow, HCM capacity, HCM v/c.
- The only program that can optimize the HCM delay of individual movements. Optimize green splits, cycle length and phasing to achieve a target amount of delay for critical movements.
- Uses the new HCM IQA delay method developed by TEAPAC's author. Dennis Strong, P.E., PTOE, TRB Committee Member & former chair of HCM Signals Subcommittee.
- Full modeling of actuated signal behavior with a published Federal method. Export to TRB's HCM computational engine to verify HCM compliance.
- TEAPAC Complete 2010 connects all your traffic studies to both HCM versions. Site Traffic TIA, Traffic Counts, MUTCD Warrants, Progression, HCM 2000, HCM 2010, TRANSYT, CORSIM, Synchro, SimTraffic, VISSIM, PASSER, TruTraffic.
- Upwards and backwards compatible with all your prior TEAPAC data files. Inexpensive annual maintenance (included) has free updates and technical support.

All 15 TEAPAC Programs Together in One

TEAPAC *Complete* (Version 8) was released in 2008, merging all prior TEAPAC programs into a single program and license, with new, **low pricing** for single user/computer licenses.

TEAPAC *Complete* represented an unprecedented leap forward in the seamless execution of the wide variety of traffic and transportation functions supported through the years by TEAPAC. Imagine, just <u>one program</u> and <u>one</u> <u>data file</u> to manage <u>all TEAPAC functions</u> and <u>all</u> <u>external programs</u>, for as many as <u>500</u> <u>intersections</u> per file, and as many as <u>25 scenario conditions</u> each for up to <u>5 independent scenario issues</u> – that's a mouthful!

Life couldn't be easier when you're using TEAPAC *Complete* 2010 for all of your multiscenario traffic and transportation analyses. Read on to see examples of how Strong Concepts' **38 years of PE/PTOE experience** in traffic and transportation engineering <u>and</u> professional software development are hard at work for you as the **TEAPAC** *Complete* user.

All of the functionality of 15 TEAPAC programs is available in a single program, delivered for one low price with a single program license, as follows:

- HCM-compliant signalized capacity analysis and full HCM optimization of splits, cycle and phasing.
- Estimation of projected volumes for traffic impact studies, including user-adjustable, automated on-screen assignments of site traffic.
- **MUTCD-compliant** signal warrant and multi-way stop warrant analyses.
- Complete traffic count analysis, including peak period determination and import of count data from a multitude of electronic traffic counters.
- Simplified bandwidth arterial progression optimization with full-color time-space diagrams.
- Full Export Capabilities for well-established third-party programs, such as HCS, TRANSYT-7F, PASSER-II, CORSIM, VISSIM, Tru-Traffic, TS/PP-Draft & Synchro/SimTraffic.

- Full **Import** Capabilities for a complete network created in **Synchro** Ver 5, 6, 7 or 8.
- Revolutionary TEAPAC multi-variable, multi-scenario data management for all applications above.
- Seamless exchange of inputs and results between all combined applications, such as peak period volumes, projected traffic volumes, optimized signal timings, computed saturation flow rates. etc.
- One downloadable manual (and one onscreen help system) covers the entire breadth of TEAPAC applications, with full index and improved graphics and output examples.

Check out the flowchart on page 4 for more details, or the **animated PowerPoint slide shows** at <u>www.StrongConcepts.com</u>. TEAPAC *Complete* 2010 offers unprecedented efficiencies for conducting a wide variety of analyses with a minimum amount of hassle and maximum reliability.

Low Pricing for Single User/Computer

The base TEAPAC Complete license is a <u>single</u> <u>user/computer license</u>, not a site license, so the **base price for TEAPAC** *Complete* Ver 8 is very affordable, starting <u>as low as \$995</u> for the entire TEAPAC system. Discounts are available for multi-copy licenses, including site licenses and agency licenses. Upgrade pricing is available for recent TEAPAC licenses, with credit given for recent license and update fees.

Software Maintenance Plan Eliminates Update/Upgrade Fees Forever

New licenses (and upgrades from prior versions) include maintenance for the next 12 months, which **includes free downloads of any and all updates and upgrades** posted during the maintenance period. This means low and predictable pricing for future maintenance periods - no more guesswork to budget for future updates or upgrades.

Our Internet distribution delivers licenses & upgrades to your desktop the same day an order is received. Call and start using TEAPAC Complete 2010 today!

Familiar *Visual* TEAPAC Interface and Upwards Compatibility

- »» Graphical front-end allows network creation and editing directly on-screen (see example screen shot on page 1).
 - Drag-and-drop manipulation of network.
 - <u>Bitmap background</u> for ease of creating network and visualizing results (aerial photo, map, plan drawings, etc.)
 - <u>Right-click</u> access to all data entry dialogs, as well as analysis results dialogs.
- **»» Enhanced graphical reports** make results easier to read and nicer to look at.
 - Full use of <u>color and graphics drawing</u> for arrows, phasing diagrams, permitted movements, time-space diagrams, intersection diagrams, cycle optimization graphs, daily count variation graphics, etc.
 - <u>Printable</u> on any color or black-and-white printer supported by Windows; pastable as .bmp bitmap into any other application.
- »» On-screen TIA Assignments on the graphical network display.
- »» Upwards and downwards compatible with prior TEAPAC data files.

2 Results of				knalysis S	ummary	(HCM 201	LO)						. • • ×	
	⊻iew S	earc (Carc		8 B	44 4	kaĭ ₽)		())	××	: ?)	
	Lincoln / PM Peak	Aver k Ho	Design S nue & Ma ur Design	in Street Conditio	ons				010)			07/22/1 15:41:53	1	
	TEAPAC[Ver 8.51.02] - Capacity Analysis Summary (HCM 2010) Intersection Averages for Int # 1 - Lincoln Avenue & Main Street V/C 0.608 (Critical V/C 0.794) Control Delay 19.9 Level of Service B													
	Sq 56	1	Phase 1	Pł	Phase 2		Phase 3			Phase 5		nase 6		
	4	3			1				5	₅₽		€_ €—*6		
	North		7		7				1 2	2 <u></u>			ſ	
	Cmax= 60" Cavg= 51"	Ga	nax= 5.0 vg= 5.0 ⊦Rc= 4.0	Gavo	Gmax= 14.0" Gavg= 11.4" Y+Rc= 4.0"				Gmax= 12.6" Gavg= 8.7" Y+Rc= 4.0"		Gmax= 12.4" Gavg= 9.9" Y+Rc= 4.0"			
	Gmax= 5.4" Gavg= 4.3" Y+Rc= 4.0"						Gmax= 13.5" Gavg= 12.1" Y+Rc= 4.0"		Gmax= 5.4" Gm Gavg= 3.2" Gav Y+Rc= 4.0" Y+					
	5.0" 4.3"		11.4" 12.1"				8.7" 3.2"	9.9" 15.5"		9.9"				
	Lane Grou		Width/ Lanes	g Max	/C Avg	SatFlo	Capct	Adj Volume	v/c	HCM Delay	L S	Queue Model 1		
	N Approach								20.8 C+					
	RT TH LT		12/1 24/2 12/1	0.083 0.233 0.090	0.224 0.224 0.085	1562 3547 1774	624 801 383	3 611	0.311 0.756 0.363	10.8 25.5 14.0	8+ *C+ 8+	59 ft 163 ft 49 ft		
	S Approach 19.1 B												- 1	
	RT+T LT		24/2 12/1	0.225 0.083	0.237 0.098	3536 1774	841 351		0.570 0.621	20.4 16.4	С+ *В	247 ft 86 ft		
	E Appr	roaci	h							25.1	C+		- 1	
	RT+T LT		24/2 12/1	0.207 0.090	0.195 0.063	3558 1774	69 11		0.780 0.650	25.0 25.9	*C+ C+	281 ft 39 ft		
	W Approach									16.3	В			
	RT TH LT		12/1 24/2 12/1	0.083 0.327 0.210	0.303 0.303 0.171	1583 3547 1774	633 1073 303	2 500	0.378 0.466 0.806	11.1 14.7 24.9	8+ 8+ *C+	74 ft 95 ft 129 ft		
Line: 23	Page	e: 2	/2											

Example Graphical Output from TEAPAC Complete 2010

What Is TEAPAC's Scenario Management?

TEAPAC *Complete* 2010 has a built-in function that can create multi-scenario data files either from scratch or from data files of earlier versions of TEAPAC. Users can:

- select from pre-defined typical scenario structures like multiple volume conditions or multiple timing plans,
- create completely unique scenario conditions for their analyses, or
- customize a pre-defined scenario structure to meet their specific needs.

The primary advantage of using SCENARIO is that all the scenario data is saved without dangers of duplicated data which often occur when scenarios are managed by the typical use of File-SaveAs.

See TEAPAC, Win Discounts, at ITE Exhibit



Strong Concepts will be demonstrating TEAPAC *Complete* 2010 and answering questions at the ITE Product Exhibit as part

of the 2011 ITE Annual Meeting in St. Louis. The meeting is Aug 13-16, and the Exhibit will be open Sunday and Monday, August 14-15.

Given the plethora of confusion and potential mis-information that can exist regarding the details of today's traffic software, Strong Concepts will have a fun and informative **Reality Game** at our booth **(#514)** where participants can win TEAPAC 20% discount coupons and be enrolled in a drawing for 40% discounts which will be held each day. The idea

of the game will be to identify what has been heard and what is reality on subjects like HCMcompliance, optimization, integration and efficiency tools.



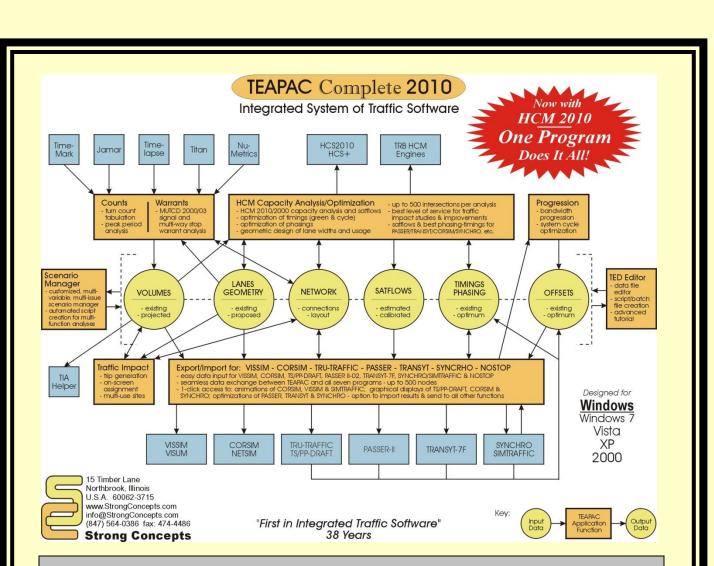
If you want to bone up on your traffic software reality facts, you can view a PowerPoint show with all the answers posted at our web page, www.StrongConcepts.com. The link can be found in the right hand margin at the top of the main page. **Come join the fun in St. Louis!**

Strong Concepts

FIRST CLASS

15 Timber Lane Northbrook, Illinois U.S.A. 60062-3715

ADDRESS SERVICE REQUESTED



Electronic Notification Service

People who have enrolled in our Electronic Notification Service may have received much of the information contained in this newsletter via email at an earlier date. If you wish to get timely notice of developments at Strong Concepts via email as they happen, go to the **Join Our Mailing List** section of our web page at <u>www.StrongConcepts.com</u> and provide the necessary information.