

Build History Version 6

Traffic Signal Timing, Capacity Analysis, and Simulation

Synchro plus SimTraffic Build 614, August 11, 2005

Synchro

- Fixed delay calculation error for actuated-uncoordinated signals.

SimTraffic

- Fixed some problems exporting history file for 3D graphics.
- Fixed stuck U-turn vehicle
- Fixed controller stuck on main street



Synchro plus SimTraffic Build 612, May 24, 2004

Synchro

- Fixed problems encountered by the version checking on some firewalls. Causes Synchro to not exit.
- Fixed some problem with unsignalized analysis of right turns
- Fixed problem with HCM intersection v/c calculation and RTOR

SimTraffic

- Fixed a problem with SimTraffic arterial reports
- Fixed a problem with multilane roundabout entries



Synchro plus SimTraffic Build 610, April 17, 2004

Synchro

- New feature, Help->Check for New Version , check's Trafficware's web site to see if an update is available. Synchro will automatically check every 14 days for a new build, if an internet connection is available.
 - Queue delays related to storage bays has been removed. Based on feedback from users and internal testing with simulations, the results predicted by the formulas do not match actual conditions. It is now believed that the dynamics of interfering lane groups is too complex to model macroscopically. The traffic conditions can change from cycle to cycle. The storage blocking analysis methods did a poor job of predicting queue delay and are not suitable for optimizing desirable timing plans and phase sequences.
 - Queue delays with spillback When downstream saturation flow is less than upstream flow, this is now treated as a partial blockage rather than a full blockage. This results in significantly less queue delay in some circumstances.
 - Queue delays for spillback and storage are calculated incorrectly with two or more lanes. Capacity is understated and delays are overstated.
 - Queue delays with storage. Some adjustments were made to increase the virtual amount of storage available to match simulations in SimTraffic.
 - Corrected problem with delay 2 calculation. The analysis time (T) was always assumed to be 15 minutes in the term $(8kIX/cT)$. Undo now works correctly after network optimize functions.
- New intersections are created correctly when the default control type is Unsignalized or Roundabout.
- The queues in the HCM Unsignalized report are 95 th percentile queues, the documentation mistakenly says they are 50 th percentile queues.
 - Multi-file comparison report: fixed problem with incorrect delays on unsignalized intersection with upstream signals.
 - Map window delays now show “dl” and “dr” with de-facto delays when a lane group has a de-facto turning lane.
 - When the current file is a sy6 file, parameters are now saved in the st6 file. When saving to a sy6 file, the st6 or st7 parameters file is copied to the st6 file. Before these were mistakenly put in the st7 file when working with a sy6 file.

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Synchro plus SimTraffic Build 610, April 17, 2004

SimTraffic

- Fixed problem vehicle getting stuck making lane change on short link.
- Fixed problem with vehicles selecting wrong turning path into short links.
- Fixed problems with permitted Left turns yielding to right turns on a single lane approach
- Fixed problem, with queue length reported high when vehicles stop on upstream right turn island.
- Fixed the number of starting vehicles was incorrectly set to zero for first recorded interval. This causes problems with the number of vehicles served and the per-vehicle MOEs.
- Fixed Queues reported correctly on multiple upstream bend nodes.



Synchro plus SimTraffic Build 609, January 8, 2004

Synchro

- Fixed problems with unsignalized AWSC calculation, most seriously all delays were divided by 4.
- Merge by lanes merges now includes right turn Channelization
- Save as with no extension now saves to version 5 if requested
- Fixed Double-Too many flows problem
- ICU spreadsheet updated, #REF# problem
- ICU PDF file updated for figures in Chapter 7
- Divide by zero error when removing lane from a congested lane group.
- Overflow error importing volumes, total volume for intersection exceeds 16000, fixed.
- Negative delays, unsignalized main street. Fixed, but Synchro and HCM still give incorrect results when main street volume exceeds sat flow.

SimTraffic

- History files over 2GB are now supported
- Vehicle stuck waiting for vehicle in intersection to make lane change, fixed
- Overflow error using database access in ST, fixed
- Stuck vehicle entering multilane roundabout, fixed
- Yield occurring early on lead-lag main street using CMin recall. Fixed
- Vehicles not entering network, midblock source into storage bay, when bay exceeds 50% of link distance.