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SIDRA INTERSECTION VERSION 5.1 UPDATE HISTORY

Version 5.1.13.2093

Release Date: 22 Nov 2012

Enhancements:

- Added support for Windows 8.
- Minor revisions to the User Guide.

Version 5.1.12.2089

Release Date: 21 Jun 2012

Enhancements:

- Topics have been added to the help system to explain licence activation and transfer procedures. These topics have been linked to relevant licensing dialogs.
- Licensing topics in the User Guide (Part 2) have been expanded.

Bug Fixes:

- After importing a roundabout site from a SIDRA INTERSECTION Version 3 (aap) file, any user-given gap-acceptance data were inaccessible.
- Minor corrections have been made to text in some dialogs.

Version 5.1.11.2079

Release Date: 4 Apr 2012

Enhancements:

- When using the New Zealand model, the "New Zealand" give-way rule will no longer apply when new Sites are created in the software (using the New, Template or Convert options). This change has been introduced as this rule ceased to apply in New Zealand on 25 March 2012. The "Change New Zealand Rule" function has been retained in the software for the purpose of converting Site data created with earlier versions to the new rule.
- When the HCM 2010 roundabout capacity model is in use, the geometry and calibration parameters which are not used in this model are no longer blocked in the Geometry dialog. Explanations are given in the Geometry dialog and Detailed Output indicating which parameters are not used in this model. Values for these parameters are now shown in the Input Report.

Bug Fixes:

- Some further problems with DAT file import and export were fixed.
- When the Pedestrian Volume Effect on saturation flow rate is used for signalised intersections, a constraint has been introduced in the adjustment factor calculations to prevent program errors when very high pedestrian volumes are specified as input.
- A problem with the "Import Volume Data From Another Site" function was fixed. This caused volumes for some movements not to be imported in complicated geometry cases where Turn Designations differed between the two Sites.
- Slip Lane error check in Geometry dialog fixed.

Version 5.1.10.2069Release Date: 9 Mar 2012

Bug Fixes:

• Some problems with DAT file import and export were fixed.

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Version 5.1.9.2068

Release Date: 11 Jan 2012

Enhancements:

• Project name shown in the application title bar.

- Installation Package digitally signed to confirm publisher details and content integrity of downloadable code.
- When the HCM 2010 Roundabout Model is selected, the disabled Roundabout parameters in the Geometry dialog will show "NA".
- User Guide improved.

Bug Fixes:

- "X" button in input dialogs was not working properly.
- The Effective Timing display in the Movement Timing report was not drawing correctly for movements with two green periods separated by a zero intergreen period.
- Control Delay for the Worst Movement graph was displaying "worst lane" rather than "worst movement" values.
- Cancel button in the Model Settings dialog did not work for some check boxes in the Roundabout tab Other Roundabout Models group.
- "Use Urban Compact Roundabout" check box in the Model Settings dialog Roundabout tab was not automatically unchecked when "FHWA 2000" check box was unchecked.
- The data range check function in the API should not check FHWA model related parameters when the FHWA model is not enabled.
- A problem in the DAT Export function was fixed.



Version 5.1.8.2059

Release Date: 18 Oct 2011

Enhancements:

- API expanded to give access to four checkboxes in the Model Settings dialog, Roundabouts tab, Other Roundabout Models group (FHWA 2000, Urban Compact, HCM 2000, NAASRA 1986).
- Installation instructions in User Guide, Part 2 improved.

Bug Fixes:

Some constraints have been introduced in a couple of parameters used for delay and queue length
calculations to prevent potential overestimation in some unusual cases with two green periods
where one of the green periods has a very short green time and a very low saturation flow rate.
This applies to fixed-time and actuated signals, and to the metered leg at roundabout metering
signals.

Version 5.1.7.2056

Release Date: 3 Oct 2011

Enhancements:

- Input dialog border improved so that it will flash to attract user attention if the dialog needs to be closed before other actions can be performed.
- Auto reset Lane Discipline behaviour improved to avoid problems in relation to deletion of Slip and Continuous lanes.
- Some table footnotes re Roundabout Models updated in the Detailed Output Report.
- User Guide and Help system improved.
- Licence Agreement updated.

Bug Fixes:

- "Process All Sites" function failed when a Graphs report was open.
- "Export DAT File" function failed for Sites based on the RTA NSW model.
- Duplicated Pedestrian movements displayed in Phasing and Timing dialog in some circumstances.
- Sensitivity Analysis for Critical gap and Follow-up Headway was not scaling program-calculated critical gap values when the HCM 2010 Roundabout Capacity model was in use.
- Some output went onto second page when using US Letter paper size.

Version 5.1.6.2039

Release Date: 29 Aug 2011

Enhancements:

- Geometry dialog will now reset lane disciplines when a lane is deleted to minimise error cases.
- Layout pictures improved for all intersection types.
- Unit Time and Peak Flow Period included in imported data if Volume Factors is checked in Import Volume Data function.
- **Export DAT File** function introduced to export an old format text input data file (DAT extension) to facilitate data exchange with other software.
- In the Phase Data dialog, the popup menu for setting phase transition and movement undetected status has been redesigned.



- Footnote for HCM Delay Model option in output reports and displays improved.
- LOS removed from HCM 2000 Roundabout Capacity Model table in Detailed Output.
- New and revised footnotes in Detailed Output Lane Queues tables.
- New phase sequences for freeway diamond interchanges added to User Guide and templates.
- German Roundabout Capacity Models removed from the set of Other Roundabout Capacity Models available in SIDRA INTERSECTION.
- Licensing error messages improved.
- API expanded to include Priorities data and computation, Phase Sequence data, Lane Discipline and Lane Type, Lane addition and deletion, Movement Turn Designation and Movement Exists status.
- Substantial updates to all parts of the Help system including Troubleshooting topics.
- Substantial updates to all parts of the User Guide. Troubleshooting section added in Part 2.

Bug Fixes:

- When using one of the US models, roundabout sites imported from Version 3.2 Project files will retain the SIDRA Standard roundabout capacity model settings and not acquire the HCM 2010 model settings.
- In the Phase Data dialog, the movement setting *Set as Detected in All Phases (All Sequences in All Sites)* did not work.
- Geometric Delays not included when the HCM Delay Formula is used for Signalised Intersections.
- Intergreen Values displayed in wrong location in Movement Timing Diagram.
- A few Model Parameters and Acceleration Parameters fixed in the resource database.
- Default values changed for some Movement and Timing data to be consistent with the allowed data ranges.
- Various data errors when importing DAT files (Version 2.1 and earlier) and AAP files (Version 3) fixed.
- The "New" and "Open" project buttons were disabled after a Project was closed in some cases.
- An underscore sign in a file name was not shown in the Recent Projects list.
- Some data errors in Templates fixed.

Version 5.1.5.2006

Release Date: 5 May 2011

Enhancements:

• User Guide Part 3 (Input Guide) updated.

Bug Fixes:

- Queue Detection Probability values for Roundabout Metering were not correct (too low) with US Customary units. .
- Timing Diagram: Pedestrian movement timing was empty in some cases.
- Gap-Acceptance parameters: Defaults for right-turn movements from major road for Two-Way Stop and Give-Way / Yield sites were incorrect for US Metric model.



Version 5.1.4.2002

Release Date: 29 Apr 2011

Enhancements:

- The default value for follow-up headway for right turns in the New Zealand Model changed to 2.6 s which is the same as the value for the Standard Left Model (was 2.4 s).
- Detailed Output Roundabout tables for Additional Models: Header lines clarified to indicate the roundabout capacity model used (SIDRA Standard or HCM 2010).
- Information added to Geometry Dialog to indicate the roundabout capacity model currently set (SIDRA Standard or HCM 2010).
- Roundabout layout picture improved.
- Minor changes to licence activation steps.
- Software licence file updated.
- User Guide improved.

Bug Fixes:

- Option setting for German Roundabout Models in the Model Settings dialog fixed.
- Problem fixed with the Urban Compact Roundabout option when Apply to the All Sites function for the Other Roundabout Models group is used in the Model Settings dialog.
- Gap-acceptance parameters (Critical Gap and Follow-up Headway) for right turns in both US versions (Metric and Customary) were set to special values for Turn On Red (6.0 and 3.0). The "normal" gap-acceptance parameters for right turns (4.0 and 2.4) should be used.
- Website links removed from output reports due to a bug.

Version 5.1.3.1990

Release Date: 12 Apr 2011

Enhancements:

- "Change New Zealand Rule" function introduced in the Priorities dialog for the New Zealand model.
- Further improvements to User Guide and Help system. Help topics per data field introduced.
- Improvements to key parameter settings related to the Capacity Model (SIDRA Standard or US HCM 2010) parameter in the Roundabouts tab within the Site and when Apply to all Sites is used.
- Minor improvements to Movement Timing output, Layout display and Input Report.

Bug Fixes:

- Minor improvements to the Intersection dialog related to checking All-Way Stop Control Site type restrictions and rotation of a Single Point Interchange.
- Roundabout entry radius: problem setting default value when old files were imported was resolved and processing range check introduced.
- A few other minor bugs fixed.

Version 5.1.2.1953

Release Date: 31 March 2011.

• First release. New features in the UPDATE NOTES document.

