



TRANSYT14

For the design and modelling of traffic signals and all types of network

TRANSYT 14

is TRL's next step in bringing efficient, effective process-driven analysis and optimisation tools to traffic professionals around the world.

Building on its reputation for designing and modelling signalised roundabouts and coordinated networks, TRANSYT 14 now adds a whole new dimension. No longer should TRANSYT be considered just a network tool - TRANSYT 14 has specific functionality now for the easy assessment of isolated signal-controlled junctions, and mixed signalised and unsignalised networks in addition to its more traditional roles.

Embedded Link Technology

enables TRANSYT, in combination with an ARCADY and / or PICADY Licence, to model non-signalised, through to partially signalised and fully signalised roundabouts and mixed controlled junctions within your network. All the data is stored within the one TRANSYT file. The effect of platoons of network traffic on the performance of unsignalised junctions, including indirect traffic control, is another example of the benefits of TRANSYT 14's integrated TRL technologies.

New degree of saturation limit penalties

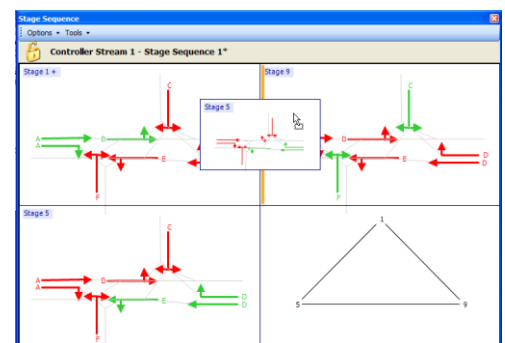
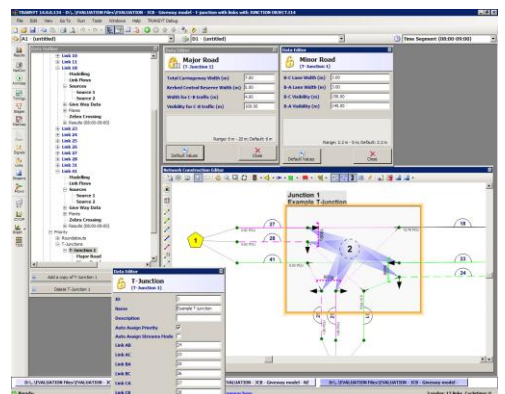
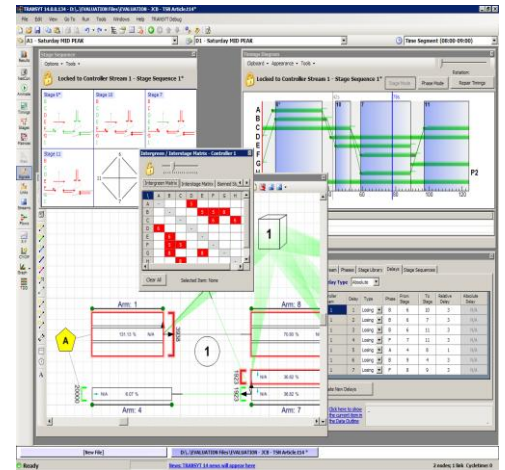
allow upper and lower limits to be specified on individual lanes or links, with associated penalties when these are exceeded. This gives TRANSYT users the ability to encourage the optimiser to provide solutions that keep the main arterials running, improving modelled journey time reliability on corridor routes, something that has a strong political backing in many countries.

Network Structures and traffic models

have had an overhaul. In addition to the traditional link structure a new Lane and Traffic Stream structure allows a direct 'one TRANSYT lane' to 'one REAL lane' relationship to be used, while maintaining the flexibility to model networks in a correct manner.

A new controller stream object separates out signal data from the network structure making for a more intuitive way of working.

Furthermore, a major modelling breakthrough gives users link-by-link choice of traffic model allows blocking effects and platoons dispersion effects to be modelled in the same network for the first time!



Staging Data

is more easily manipulated graphically using enhanced stage sequence diagrams and signal timing diagrams with both phase or stage manipulation modes, or by typing in timing data directly. Automatic stage and sequence generation also speeds up model development.

Optimisation

has been “touched” by the team, in addition to the standard “Hill-climb” there is now the additional option of either “Simulated Annealing” or “Shotgun Hill-climb” optimisation.

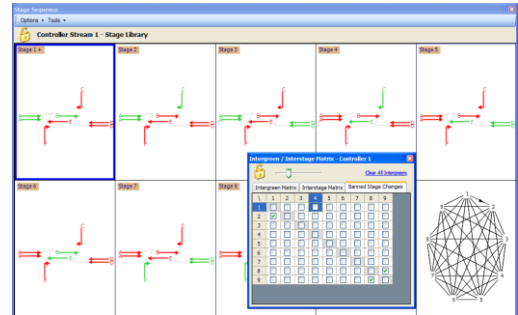
NEW Priority Junction Modelling:

- Priority junction objects calculate give-way slope and intercept coefficients from geometric data^{*1}
- Assigning of give-way coefficients to links or traffic streams^{*1}
- Fully unsignalised junction modelling^{*1}
- Unlimited conflicts on give-ways
- Modelling of indirect traffic control effects
- Give-ways controlled by a mix of signal controlled and unsignalised traffic

^{*1} Requires an ARCADY and/or PICADY licence

NEW Modelling features:

- Traffic Stream and Lane network representation
- Blocking back and platoon dispersion modelled in the same network
- Mutual opposition modelling
- Enhanced opposed offside-turn model
- Complex flares/blocking using the new CPDM model
- Improved modelling of oversaturated conditions
- Links controlled by up to two phases
- Signal controller phases
- Separate controller stream and phase data items
- Zero link flows allowed
- Conflicts defined by movement, link or traffic stream
- Major and minor links with different conflicts
- RR67 saturation flow estimation per lane or link
- Constant red or constant green signals
- Updated (WebTag-based) fuel consumption figures

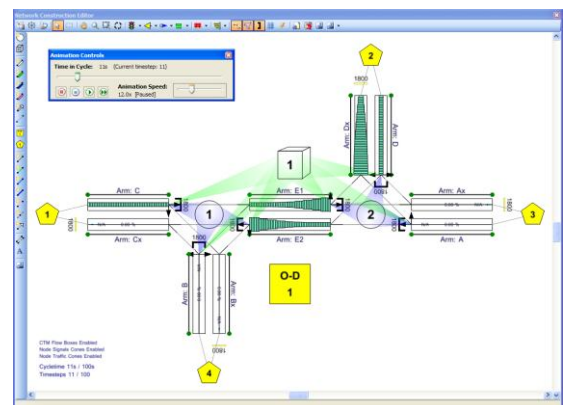


NEW Optimisation features:

- Phase and stage minimums and maximums
- Sophisticated stage and phase optimisation
- ‘Too high’ and ‘too low’ link DoS penalties
- Choice of three network optimisers
- Phase and stage sequence optimisation
- Green splits locking

NEW Interface Features:

- File comparison tool
- Report conversion to PDF and Word formats
- Enhanced CFP graphs
- Easier manipulation of stage sequences
- Stage or phase-based manipulation of signal timings
- Signal Terminology choice (UK/Aus)
- Data File Library (Template) system with graphical preview screen.
- User-defined reporting of offsets
- Improved data-entry screen screens
- PDM flow animation
- Red/Green times shown on phases and connectors
- Controller-by-controller display of phases
- Colour-coded traffic streams



More details available from our website.

Feature list subject to change prior to product release