

Specification Table

The following table is a summary of the main features and capabilities of TRANSYT 16.0:

Feature	TRANSYT 16.0
Types of intersection that can be modelled	Signalled intersections Roundabouts – Fully signalled Roundabouts – Mixed signalled & unsignalled Roundabouts – At-grade and grade-separated
Multiple intersections / networks	Small networks – Mixed signalled & unsignalled, including: <ul style="list-style-type: none"> • Roundabouts • Mini-roundabouts • Grade-separated roundabouts • Priority intersections Arterials Large networks – Signalled & mixed
Model types	Macroscopic: <ul style="list-style-type: none"> Platoon Dispersion Cell-Transmission Congested Platoon Dispersion Simulation
Pedestrian crossings	Signalled
Other scenarios modelled	CLF Complex signalling arrangements Continuous flow junctions Bypass lanes Flares
Scenarios modelled exclusively by Simulation model	Intermittent stages (i.e. non-cyclic behaviour) Inherent modelling of blocking back issues Explicit modelling of complex flares (short bays) Modelling of entire modelled period Controller streams running on different cycle times
Automatic determination of optimum stage sequence and phase delays for single signalled junctions	✓
ARCADY / PICADY give-way coefficients derived within TRANSYT* (subject to ARCADY/PICADY module licences)	✓
Lane design capability (Lane flows)	✓
International appropriateness	✓
International Localisation features	✓
Units	Customisable
Modelled time period	Any
Time Varying traffic flow conditions	✓
Easy traffic allocation (with various user options)	✓
Traffic assignment (User Equilibrium Model)	✓ Applied Locally or over wide-area
Traffic profile types	FLAT GAUSSIAN DIRECT

Feature	TRANSYT 16.0
Choice of link structure (for speed) or lane structure (for ease of use)	✓
Choice of network optimisation	✓
Signal Optimisers (Macroscopic models)	Hill-climb Simulated Annealing Shotgun Hill-climb Link-by-link hill-climb (faster optimisation)
Optimiser constraints and influencers	Weighting factors for each part of network Queue length penalties Degree of Saturation limit penalties Signal timing penalties (e.g. phase maximums) Locked controller times (per controller) Offset only optimisation (per controller) Locking of stages between controllers (CLF)
Timings to favour Buses/Trams	✓
Turn-on-red calibration	✓
Dutch TxC calculation	✓
Alternative Chilean (TRANSYT 8S) platoon dispersion	✓
Pedestrian Delay (Including walk-on-red behaviour)	✓
Multiple Analysis sets (Signal Plans)	✓
Multiple Demand sets	✓ Including combining of sets
Optimise specific Demand Set	✓ Optimisation based on one particular demand set, and other demand sets evaluated using these timings.
Classified count data-entry	✓
Data sharing (between sets) system	✓
O-D flow sharing over multiple junctions	✓
Multiple easy data-entry methods to suit circumstance	✓ Via tabbed screens, data grids or tree structure
Easy simultaneous editing of multiple data items	✓
Fully Customisable HTML Reports	✓
Report export to Word and to PDF	✓
Phase and stage Sequence Diagrams	✓
Automatic calculation of phase conflicts* (*from scaled diagram)	✓
Automatic calculation of intergreens*	✓
Automatic calculation of RR67 saturation flows	✓
Network/Intersection diagram	✓ Extensive display options network background images In-diagram editing of timings via timing wheels Extensive diagram overlay selection 3-D representation of network diagram Network animations (2D or 3D) Import of 3-D (Collada format) models Saveable 3-D fly-through of network
Network/Intersection diagram (Simulation Only)	✓ Animations showing individual vehicle movements Queue percentiles displayed Average queues Vehicles tagged with Path IDs Various filtering options, e.g. by source location Various colour coding, e.g. by time in queue

Feature	TRANSYT 16.0
Multiple graph types	✓ Cyclic flow profile graphs Traffic graphs Time-distance diagram Analyser (x-y) graphs
Import from all previous TRANSYT versions	✓
Various other import options	✓
Dynamic link to Excel	✓ For easier import of traffic flows
Automatic renaming of network items	✓ Speeds up network construction
Compare files	✓
Compare sets (within same file)	✓

Technical	
Opt-in for TRL Customer Experience program	✓
Choice of stand-alone and network licence	✓
Student edition / Educational licence / Leasing option	✓
Product leasing option available	✓
64-bit	✓
Desktop application for Windows 7, Windows 8 and Windows 10	✓