

Specification Table

The following table is a summary of the main features and capabilities of TRANSYT 15.5:

Feature	TRANSYT 15.5
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: Platoon Dispersion Cell-Transmission Congested Platoon Dispersion
Pedestrian crossings	Signalled
Other scenarios modelled	CLF Complex signalling arrangements Continuous flow junctions Bypass lanes Flares
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 flow conditions	✓
Easy traffic allocation (with various user options)	✓
Traffic assignment (User Equilibrium Model)	✓
Traffic profile types	FLAT GAUSSIAN DIRECT
Choice of link structure (for speed) or lane structure (for ease of use)	✓
Choice of network optimisation	✓
Optimisers	Hill-climb Simulated Annealing Shotgun Hill-climb

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	✓
Pedestrian Delay (Including walk-on-red behaviour)	✓
Multiple Analysis sets (Signal Plans)	✓
Multiple Demand sets	✓ Including combining of sets
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 or 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
	✓
	Cyclic flow profile graphs
	Traffic graphs
	Time-distance diagram
	Analysers (x-y) graphs
	✓
Multiple graph types	✓
	✓
Import from all previous TRANSYT versions	✓
Various other import options	✓
Compare files	✓
Compare sets (within same file)	✓

Technical

Choice of stand-alone and network licence	✓
Student edition / Educational licence / Leased	✓
64-bit	✓
Desktop application for Windows 7, Windows 8 and Windows 10	✓