



TRL + SAVOY = AutoTrack Junctions

TRL Software has collaborated with Savoy Computing Services Ltd to develop an innovative new system for designing roundabouts. The system links two market leading products, ARCADY and AutoTrack, to produce a revolutionary software program, AutoTrack Junctions, which will drastically reduce the time taken to geometrically design roundabouts.

ARCADY is our long established roundabout flow/capacity analysis system which assesses roundabout performance taking into account the geometry and placement of features such as pedestrian crossings. The system predicts delays, flow rates, queue lengths and various performance criteria. ARCADY 7 incorporates many improvements to the user interface and has been tested on Windows 7.

AutoTrack Junctions is a totally new roundabout CAD design program that allows engineers to design roundabout geometry interactively to selected UK or US standards. It allows users to model roundabouts with up to eight arms and caters for splitter islands, pedestrian crossings, rumble strips and traffic controls. Additional options let the user analyse driver and pedestrian sightlines, stopping distances and fastest line speed.

Traditionally two people have been involved in roundabout design; one person responsible for the geometry (typically a road engineer) and another for the vehicle flow/capacity analysis

(typically a traffic engineer). The design process is then a matter of adjusting the geometry and re-analysing until both parties are happy. By linking ARCADY and AutoTrack and combining these two operations, the time taken to produce efficient, well balanced roundabout designs is significantly reduced. Once initiated the two programs talk seamlessly to each other ensuring that, whichever program is in use, the data is synchronised with the other program. Values may be changed in either program and the data integrity will be preserved. The system runs in AutoCAD, MicroStation or standalone in Windows.

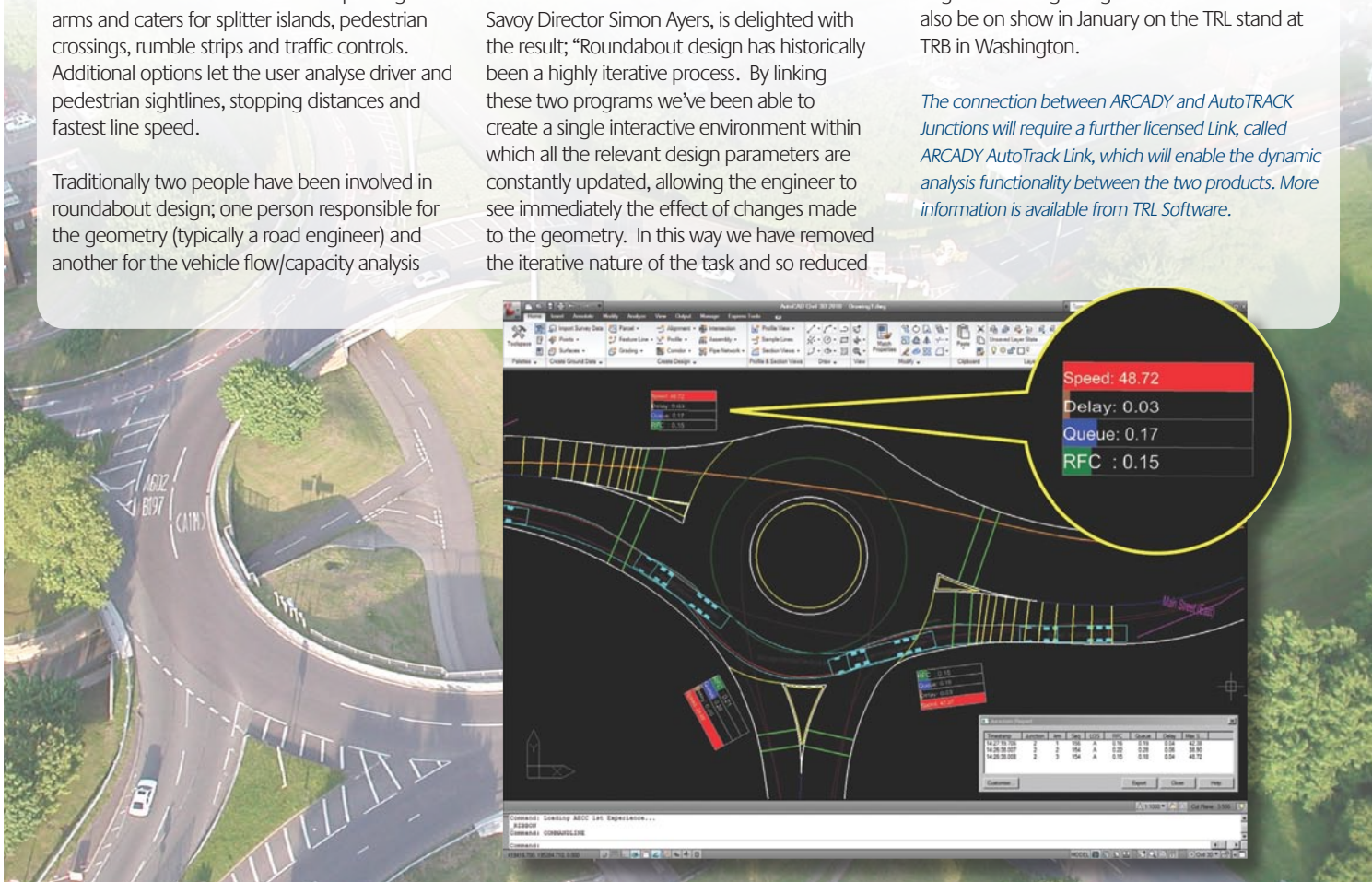
Savoy Director Simon Ayers, is delighted with the result; "Roundabout design has historically been a highly iterative process. By linking these two programs we've been able to create a single interactive environment within which all the relevant design parameters are constantly updated, allowing the engineer to see immediately the effect of changes made to the geometry. In this way we have removed the iterative nature of the task and so reduced

the design time, improved the design efficiency, and ultimately, reduced the cost. The result has exceeded even our expectations."

Gavin Jackman Head of Traffic and Software at TRL, is equally enthusiastic. "It has been a pleasure working with Savoy and the result is a product that takes BIM (Building Information Model) principles into the traffic engineer space and is set to revolutionise the way we work in the future."

AutoTrack Junctions was previewed by Savoy Computing at the Autodesk University in Las Vegas at the beginning of December and will also be on show in January on the TRL stand at TRB in Washington.

The connection between ARCADY and AutoTRACK Junctions will require a further licensed Link, called ARCADY AutoTrack Link, which will enable the dynamic analysis functionality between the two products. More information is available from TRL Software.





PERS marches on with the release of PERS 3.1

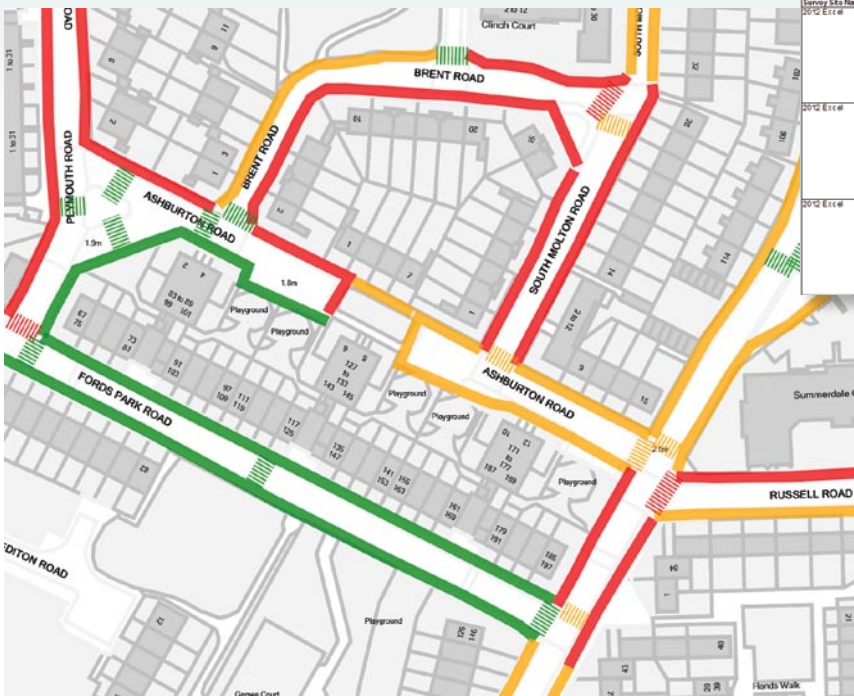
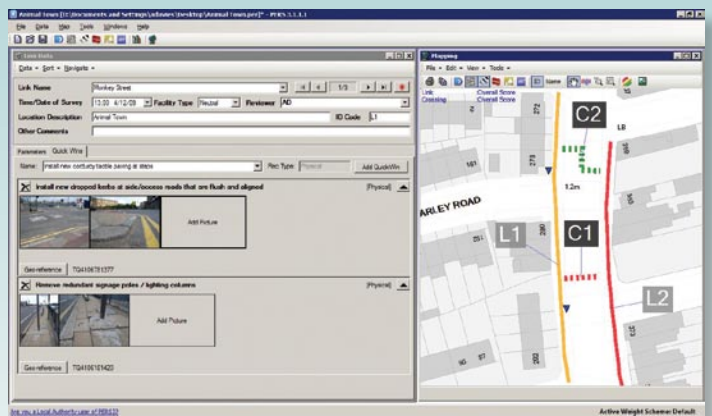
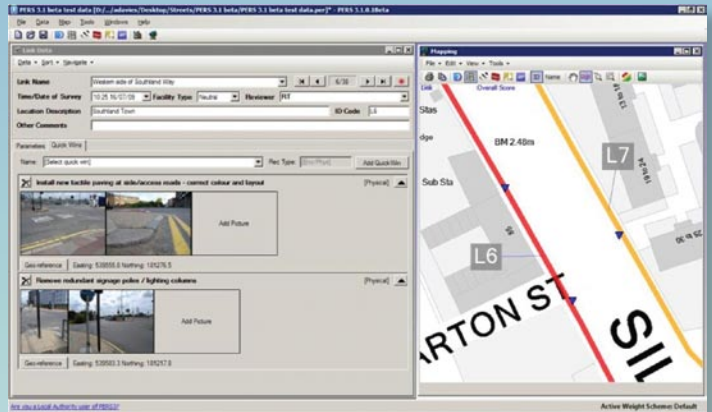
TRL's successful PERS software (Pedestrian Environment Review System), used by Transport for London, London Boroughs and Local Authorities across the UK, has recently undergone an upgrade and a refresh. The enhancements continue our quest to build software for streetscape designers, highway maintenance officials and walking and cycling officers that is useable and delivers real benefits.

Those familiar with PERS3 will know of its inbuilt GIS mapping capabilities, export functions to other GIS software tools and the production of quick win recommendations. Adding to this, PERS3.1 now closes the loop between highway engineers and maintenance crews, through the automated production of work lists based on audit findings and quick win recommendations.

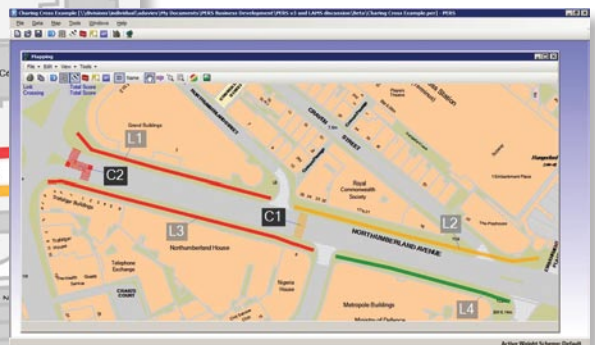
The software also allows photographs and geographic coordinates to be registered against specific problems requiring rectification, adding to the "whole view" data set that the software can now store. The software also allows for faster access between audit findings and recommendations, through new tabbed interfaces. To assist with the preparation of reports, which often require high quality map outputs, an enhancement to the existing map export function has been developed, allowing Metafile image exports.

PERS 3.1 is a comprehensive and flexible tool for the streetscape professional, and invaluable in the development of a sound business case for high quality street environments.

For more information please e-mail software@trl.co.uk



Pedestrian Improvements Work List (PERS3)									
Specific Maintenance Recommendations									
Survey Site Name	Unique Facility ID	Type of Facility	Date	Time	Facility Location	Recommendation	Geographic co-ordinates (OSGB36)	Photograph of problem	Rec Type
2012 Ercle	L5	Link	16/07/2009	10:25	Western side of Sherborn Way	Narrower redundant signage poles / lighting columns	Easting: 639558.3 Northing: 101217.6		Physical
2012 Ercle	L6	Link	16/07/2009	10:26	Western side of Sherborn Way	Install new tactile paving at existing side-access roads - correct colour and layout	Easting: 639558.9 Northing: 101217.6		Physical
2012 Ercle	L7	Link	16/07/2009	09:45	Eastern side of Sherborn Way - Woulsham Rd	Narrower graffiti from infrastructure along the link	Easting: 639602.2 Northing: 101201.5		Environmental



HDM-4 CONTINUES TO GROW

In August 2008 TRL were appointed as distributors of the electronic download version of HDM-4 Version 2 via our website and through Software Sales.

HDM-4 Version 2 is an internationally recognised tool for the analysis of road management and investment alternatives. It is used by government road administrations and agencies, transportation consultants, and education and transportation research institutions worldwide. HDM-4 is managed by HDMGlobal, of which TRL is a partner. HDMGlobal were awarded a five year concession by PIARC to 2010, to be extended for a further five years due to continued success.

Strong sales have been recorded with over 620 HDM-4 Version 2 licences sold to over 100 different countries highlighting the world-wide usage of HDM-4 Version 2.

HDM-4 Version 2 provides a powerful system for:

- Road management
- Programming road works
- Estimating funding requirements
- Budget allocations
- Predicting road network performance
- Project appraisal
- Policy impact studies

The four main areas of application of HDM-4 Version 2 are:

- **Strategic Planning:** to determine medium to long term planning estimates of funding needs for road network development and maintenance
- **Roadwork Programming:** to determine a schedule of optimum pavement maintenance and/or road improvement projects which can

be carried out within specified budget constraints.

- **Project Analysis:** to evaluate one or more road projects or investment options.
- **Research and Policy Studies:** to evaluate the effects of road sector policies on such things as road user costs, energy consumption, vehicle emissions, network asset value.

The software and comprehensive documentation are currently available in English and French, with the Spanish version of the software becoming available in January 2010.

HDMGlobal operates a HDM-4 User Group for users to discuss their practical experiences of using the software, and User Group meetings are held to present examples of usage throughout the world.

Contact Details

Further details on HDMGlobal or HDM-4 Version 2 may be obtained by contacting Software Sales.

HDMGlobal is an international partnership between WS Atkins, the University of Birmingham, Scott Wilson, and TRL Ltd of the UK, ARRB Transport Research Ltd of Australia, ENPC, and Scetauroute of France, and ICH of Chile. HDMGlobal has been awarded the management concession and exclusive distribution rights of HDM-4 Version 2 by PIARC.

For more information please e-mail software@trl.co.uk



IMTRAC

TRL is delighted to announce a partnership with the Ian Routledge Consultancy to collaborate on the promotion and resale of IMTRAC software to traffic engineers around the world.

Information about traffic control equipment is an asset which many Local Authorities and consultants could manage and utilise better. The Ian Routledge Consultancy and TRL have both worked on projects where information about traffic signals, variable message signs, bus priority, communications etc is inaccessible, badly filed or misplaced. The result is information rapidly becomes out of date or is not available when required. This can lead to costly

preparation and back tracking when those all important files are needed and the knock on effect is increased delays and congestion. IMTRAC (Information Management for Traffic Control) has been developed by the Ian Routledge Consultancy to provide a solution by storing information on-line and allowing direct or map based access to crucial information as well as data management and export tools – effectively an ‘intelligent’ filing cabinet.

The software incorporates an on-line database with map based user interface, with access (in the office or on street) to all pertinent site information via a map icon for all equipment types. With access levels for different users and detailed information for each site included, IMTRAC is an invaluable tool to share information as well as facilitating easy identification and management of assets, managing faults and facilitating replacement planning.



TRANSYT 'LINKS' UPDATE

Late 2009 was an important time for TRANSYT 13 – The month saw the release of the time-saving “TRANSYT-Aimsun LINK” as well as an update to the “TRANSYT-VISSIM LINK” which ensures it is compatible with the new VISSIM version 5.2.

TRANSYT-Aimsun LINK

The addition of the TRANSYT-Aimsun link brings similar benefits to that of the existing VISSIM LINK – Allowing two world-leading software products to work together to provide an efficient way to optimise the signal settings in an Aimsun area-wide microscopic model using TRANSYT 13.





Information Management for TRAFFIC CONTROL

IMTRAC also provides various tools including support for development, roll out and management of IP communication, which, given the potential to significantly reduce operating costs, will be of interest to all Local Authorities.

Gavin Jackman, Head of Traffic and Software at TRL, says: "TRL provides a wide range of tools for the traffic engineer which are used around the world. These tools are in daily use, but there are deficiencies in the process which we believe IMTRAC solves. As our products expand their use, it's important that we consider engineers' processes and in times of recession, solutions that provide cost effective process savings are even more important."

Ian Routledge comments "IMTRAC provides the means to make the most of available assets such as traffic signals and this is vitally important as pressure on the road network

increases but available funding decreases. IMTRAC also is very useful to support management of new works as well as operation and all schemes where we have used IMTRAC the savings and benefits have outweighed the investment. Partnering with TRL allows us to provide IMTRAC to a wider base. We will continue to support our existing customers, but utilising TRL's expanded geographical reach accesses a much wider customer base. With this we can build the product even further and we have some exciting plans for it."

TRL plans to develop links to IMTRAC to allow direct export within their products allowing even greater time-savings and efficiencies.

IMTRAC is available now and to discuss how this may benefit your organisation or your next project, please contact TRL in the normal way.

WHY USE IMTRAC

Information about traffic control equipment is an asset which many Local Authorities fail to manage and utilise well. Consequently information rapidly becomes out of date or is not available when required, which can lead to increased delays and congestion as well as increased maintenance costs. IMTRAC (Information Management for TRAFFIC CONTROL) provides a solution by storing information electronically and allowing direct or map based access to crucial information as well as data management and export tools.

KEY FEATURES

- Database with map based user interface
- Map based interface:
 - allows users who are familiar with the geographic area to quickly locate the site
 - supports different equipment types
 - shows interrelationships between sites
- Access to all pertinent site information via a map icon for all equipment types:
 - drawings and site photos
 - controller specifications and cabling schematics
 - communications and bus priority etc
- Detail information for each site including:
 - reference, SCN, postcode etc
 - controller manufacturer / type
 - communications information
 - site furniture information
- Summary table:
 - for all equipment types
 - export facilities
- Access levels for different users



General Site Information		Bus Priority Data		Site Data				
ID	Address	Postcode	Site Type	Photo	Overview	Spec	Models	Site Schematics
YK201	Heworth Road - Melrosegate - East Parade - Heworth Village		Junction	Photo	Overview	Spec	Models	Site Schematics
YK202	Tower Street / Bishop Gate Street		Junction	Photo	Overview	Spec	Models	Site Schematics
YK203	Boroughbridge Rd - Carr Lane	YO26	Junction	Photo	Overview	Spec	Models	Site Schematics
YK204	York Rd / Carr Lane		Junction	Photo	Overview	Spec	Models	Site Schematics
YK205	Prepoleon Rd - Acacia Rd	YO34	Junction	Photo	Overview	Spec	Models	Site Schematics
YK206	Fossbank / Fines Islands Rd		Junction	Photo	Overview	Spec	Models	Site Schematics
YK207	Tadcaster Rd - St Helens Rd		Junction	Photo	Overview	Spec	Models	Site Schematics
YK208	Tadcaster Rd - Simsbak Lane		Junction	Photo	Overview	Spec	Models	Site Schematics
YK209	Chasing - Tebb		Junction	Photo	Overview	Spec	Models	Site Schematics
YK210	Bisson Street - Queen Street	YO24	Junction	Photo	Overview	Spec	Models	Site Schematics
YK211	Museum Street - St Leonard's Place	YO1	Junction	Photo	Overview	Spec	Models	Site Schematics
YK212	Waingate Bar - Fines Islands Rd	YO1	Junction	Photo	Overview	Spec	Models	Site Schematics
YK213	Bootham - Gillygate	YO30	Junction	Photo	Overview	Spec	Models	Site Schematics
YK214	Station Rd - Landul Arch Oystery	YO1	Junction	Photo	Overview	Spec	Models	Site Schematics

BENEFITS

- Identify and manage assets
- Easily share information between different users
- Calculate power usage
- Manage faults
- Facilitate replacement planning

For more information please e-mail software@trl.co.uk

By automatically communicating the signal settings between the two programs, the TRANSYT-Aimsun LINK removes costly data input time and reduces substantially the chances of inputting rogue data. To find out more simply look up "TRANSYT-Aimsun" on our website.

TRANSYT-VISSIM LINK

VISSIM users will notice how VISSIM 5.2 includes considerable changes to the way the signal control data is stored. These changes have been fully taken into account in the latest TRANSYT-VISSIM LINK to ensure the link will continue to work if you are using an earlier version or 5.2.

The opportunity to make a number of minor maintenance changes were also included in this release. The most significant of these changes was the removal of the limitation on the number of links and nodes that could be modelled using TRANSYT's popular blocking-back model - the Cell-transmission model - further enhancing its capabilities!





MAINTENANCE RELEASE UPDATE

ARCADY 6 and PICADY 5 maintenance releases

New versions of ARCADY 6 and PICADY 5 will be available early in the New Year and can be downloaded from www.trsoftware.co.uk/downloads. Please note that you will need a download code, which can be obtained by emailing software@trl.co.uk.

Contact us at the same address if you would prefer to be sent a CD.

These replace the previous versions and fix a number of minor bugs.



ARCADY 7 maintenance release

A new version of ARCADY 7 will be available early in the New Year and can be downloaded free of charge from www.trsoftware.co.uk/downloads. Please note that you will need a download code, which can be obtained by emailing software@trl.co.uk. Contact us at the same address if you would prefer to be sent a CD.

The new version is **ARCADY 7.0.1**. As well as various bug fixes, this version contains a number of enhancements and improvements to the software and we strongly recommend that you download the new version. The main changes are listed below, and a full set of release notes will be available on our website.

Speed

- The GUI is now significantly faster in terms of screen refreshing and general responsiveness. The speed of model runs and report generation has also been improved.

Junction Diagram

- The ruler is now easier to manipulate and move.
- When working with multiple roundabouts, the diagram displays the ID or name of each roundabout.
- Arm names can now be displayed at right-angles to the arm, which makes most diagrams look tidier.
- Arms can be pivoted around the centre of the roundabout by dragging the arm label.
- A new button allows you to toggle between displaying the diagram normally with any backgrounds, showing only the background, or showing only the diagram without the background. This is very useful if the background consists of a detailed drawing that overlaps in a confusing way with the ARCADY diagram.
- A new user preference allows you to specify whether the first arm in a new file should be located at the top, right, bottom or left of the junction diagram (with all other arms following as per the usual arm ordering convention).
- If the diagram has a background, this is now included when the diagram is printed or copied.

GUI

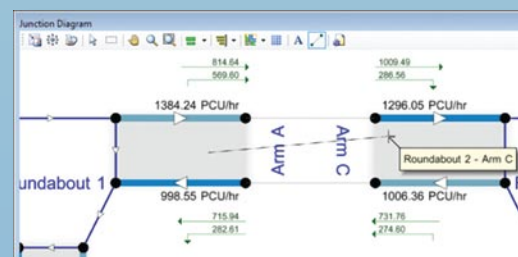
- When a column is resized, the new size is remembered by the program and used whenever the data is shown, even if you move to other areas and back again. (Previously, the column widths would reset on every data move.) This also applies to the size of the Data Editor.
- The Summary Results screen is now easier to use when a file contains several roundabouts.

Capacity and Intercept Adjustments Screens

- The way that these screens work has been simplified. The capacity adjustment calculations screen now applies to all arms rather than a single arm.

Linked Roundabouts

- Links between roundabouts can now be set up graphically by using a new 'Connect' tool in the Junction Diagram. To link roundabouts, simply click on the two arms that you wish to connect and ARCADY 7 will do the rest and automatically set up the appropriate data in the Flows screen. This is much easier than the previous method (which you can still use) of entering 'from' and 'to' IDs in the Flows screen.
- There are now some additional rules in place which prevent the use of certain combinations of model features which could lead to unstable model runs. This mostly covers the use of exit restrictions in conjunction with capacity scaling and certain use of pedestrian crossings.
- There are also now more options for setting up linked roundabouts, with the recommended options depending on the distance between the roundabouts. Please also see the opposite article for further information.



Above: using the new Connect tool to link two roundabouts graphically.

Analysis and Demand Sets

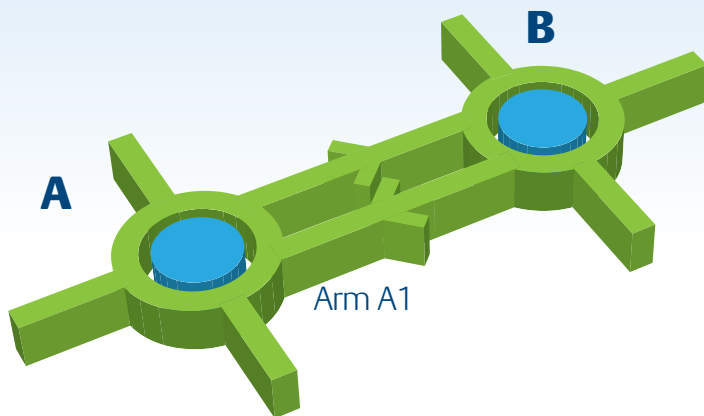
- It is now possible to set up an Analysis Set to use more than one specific Demand Set. For example, if there are three Demand Sets D1, D2, D3, then it was previously possible to set up any Analysis Set to run either all three Demand Sets or else exactly one specific Demand Set. It is now additionally possible to run any combination of Demand Sets by entering a comma-separated list in the 'Demand Set' property of the Analysis Set.

For more information please e-mail software@trl.co.uk

Using ARCADY 7 to model linked roundabouts

One of the main features of ARCADY 7 is the ability to feed traffic from one roundabout into another, and we've been pleasantly surprised at the number of users who have made use of this facility. User feedback has however indicated that the application and suitability of this feature depends on the nature and spacing of the junctions. We are always seeking to improve our products and so, for ARCADY 7.0.1 (see previous article) we have added some new options to the linked roundabout system.

To begin with, there follows a recap of the method used in ARCADY 7.



If a file contains roundabouts A and B, you can tell the ARCADY model to feed the outflow from A in as the inflow to B, overwriting any previously input flow for B. This usually also works the other way round as well, so that A feeds B and B feeds A. This general system can be extended to any number of roundabouts. In ARCADY, it tends to be the case that everything depends on everything else (e.g. entry flows depend on circulating flows, which depend on entry flows, and so on). The linked roundabout system is an extension of the general iterative mathematical procedure used by ARCADY that deals with this dependency problem. What happens if a queue forms in-between the roundabouts? In this simple model, such a queue is treated as a 'vertical' queue and allowed to happily build up to a size that may be greater than the physical space between the roundabouts. As the user you have to spot such a queue and conclude that the roundabout system doesn't work, which is about all you can do. So far, so good.

Now forget about linked roundabouts for a moment and consider a single roundabout, 'A'. An entirely separate ARCADY 7 feature allows you to place an **exit restriction** on any one exit (say Arm A1) from the roundabout. This is intended to let you model physical effects such as width restrictions on the exit. (Currently only one exit restriction per roundabout is allowed.) This works by using the concept of a capacity reduction that is experienced by any vehicle that has Arm A1 as its destination. In the diagram, if the exit restriction is on the eastern arm of roundabout A, any vehicle entering on any arm and travelling to the east will

suffer this capacity reduction. This capacity reduction is applied in ARCADY 'before' the vehicles enter the roundabout. In effect, this means that vehicles are 'aware' of the exit restriction before they enter the roundabout, and wait at their give-way line, as opposed to a queue forming in the circulating carriageway. It is also assumed that vehicles making other movements are not affected by the exit restriction, although they do have to queue behind vehicles that are affected. The net effect is that the exit restriction causes queues to build up on the entry arms. In ARCADY 7 this is a mathematical model that sits on top of the main empirical roundabout model.

Returning to the case of two linked roundabouts, a feature is included in ARCADY 7 that lets you specify the link from, say A to B as forming an **automatic exit restriction**. This is specified on the Flows screen and, when ticked, also lets you enter an **internal storage space** of, for example, 20 PCU. This sets things up so that vehicles exiting A effectively 'see' the capacity of the entry at B and this is used as if it were an exit restriction on A, e.g. if the exit flow from A is 1800 PCU/hr but the geometry at B is such that the capacity of the entry to B is only 1000 PCU/hr, this capacity reduction is applied as described above. In effect, vehicles entering roundabout A can 'see' the downstream capacity at B. This is reasonable at a small double roundabout, where drivers can literally see what's coming next (and perhaps complete the entire manoeuvre in one go) but unreasonable if there is any meaningful separation between the roundabouts. Because the capacity of the exit flow is capped to the capacity

of the downstream entry, the uniform queue along the link is always zero. Although it's possible for a random queue to build up, ARCADY prevents the exit flow from rising above a level that would cause the random queue to exceed the link storage. Instead, the queue forms on the entries to roundabout A. With a two-way link, the above is simply applied to both roundabouts.

The system above can work well in many cases but has two main drawbacks that become apparent at the two extremes of linked system sizes:

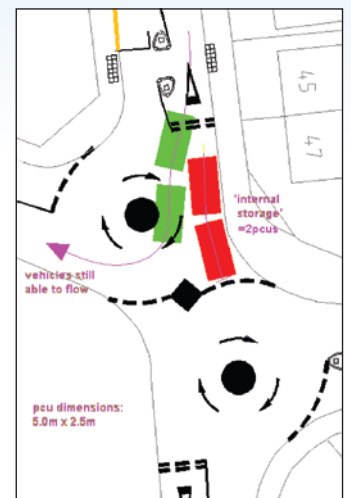
1. Double mini-roundabouts

At these junctions, the internal storage space is very small or even zero. If even a very small random queue forms in the internal storage space, ARCADY responds by throttling the entry flows, which results in very large entry queues. This behaviour is unrealistic and is hyper-sensitive to small random queues in between the roundabouts. It may be that, due to their multiple interactions, double mini-roundabouts behave almost as a completely different class of junction. Unfortunately, however, a specialised model does not exist, so the linked roundabout system is still the most appropriate model. In ARCADY 7.0, we recommend that you turn off the 'Forms Exit Restriction' option and simply treat any internal queue as a vertical queue. **For ARCADY 7.0.1, a new option allows you to keep the capacity limiting feature but to explicitly ignore the random queue element.** This option, which is recommended for SMALL systems, gives more realistic results.

When modelling double mini-roundabouts, it's also worth noting that any system where the normal rules of the road are broken (or at least tested) may present modelling challenges. One example of this is a T-shaped mini where the geometry and flows are such that the straight-through flow acts as if it has priority over the other movements. This behaviour may or may not occur at individual roundabouts so would need to be examined on a case-by-case basis.

A final consideration for double mini-roundabouts is that, when entering the internal storage space, this should be thought of as representing the space

that queuing vehicles can wait without impeding other traffic, as illustrated below:



Above: internal storage at a double mini-roundabout. Thanks to Martin Llavallol of Peter Brett Associates.

2. Widely separated roundabouts

These systems have almost the opposite attributes to those above. Drivers are not generally aware of the downstream capacity and so will simply enter the linking section and form a queue, which will be composed of both a uniform and random element. In ARCADY 7.0.1 it is possible to specify that an exit restriction (capacity reduction) should NOT be used but that you still want to **limit the queue to the distance between the roundabouts**. If the flows are such that a bigger queue would form, the queue is pushed back to the upstream entries. This sounds very similar to the original ARCADY 7 method, but the distinction is that ARCADY 7.0.1 will check the queue rather than the capacity of the link.

In summary, ARCADY 7.0.1 has an enhanced set of options for modelling linked roundabouts, with the choice of option depending on the space between the roundabouts. A revised version of the User Guide contains full details and we will be happy to examine any individual cases from users. This is still a new feature of ARCADY and so we would welcome any feedback.

For more information please e-mail software@trl.co.uk

The following training courses are scheduled to be held at TRL headquarters in Crowthorne.

All training courses can be tailored for users' needs and conducted either at their place of work, whether in the UK or overseas, or at TRL on dates convenient for users.

One Day TRANSYT Upgrade Workshop in CROWTHORNE

21st January 2010

The course is ideal for existing users of TRANSYT who would like to learn about the new features in TRANSYT 13. Ideal for those who plan to upgrade and for those who have done so already.
Course Fee: £270 per delegate

One Day ARCADY 7 Upgrade Workshop in CROWTHORNE

29th January 2010

The course is ideal for existing users of ARCADY who would like to learn about the new features in ARCADY 7. Ideal for those who plan to upgrade and for those who have done so already.
Course Fee: £270 per delegate

One Day ARCADY/PICADY Workshop in CROWTHORNE

5th February 2010

Aimed at beginners, you will use the latest versions of ARCADY and PICADY, to model roundabouts, mini-roundabouts and unsignalised priority junctions.
Course Fee: £270 per delegate

Two Day TRANSYT Workshop in CROWTHORNE

10th – 11th February 2010

Aimed at beginners, the course will benefit engineers involved in the design and operation of traffic management and control in urban areas.
Course Fee: £540 per delegate

One Day OSCADY PRO Workshop in CROWTHORNE

26th February 2010

The course is aimed at users of all levels of experience, and will cover the practical essentials of the software. The workshop is ideal for existing users of OSCADY and other traffic signal design products who have upgraded already, and for those planning to do so.
Course fee: £270 per delegate

All prices exclude VAT.
All bookings are subject to places being available.
TRL reserve the right to cancel a course if there is insufficient demand.

MOVA moves on

As many readers will already know, MOVA (Microprocessor Optimised Vehicle Actuation) is a well-established traffic signal control strategy that was researched and developed on behalf of the Government by the then Transport and Road Research Laboratory (TRL) in the 1980s to replace Vehicle Actuated (VA) System D. Considerable research was carried out to develop MOVA culminating in the 20-site trial in 1989. Research and development, has continued and one of the more recent outcomes is the development of Compact MOVA.

MOVA is extremely effective at all types of isolated signal control junctions. It can also be applied effectively as 'linked' MOVA in small networks, especially signalised roundabouts. Not only is MOVA effective at minimising delay or maximising capacity (whichever is appropriate at the time) research has shown it to be as safe as VA System D with Speed Assessment or Speed Discrimination Equipment (SA/SDE).

The effectiveness of MOVA can be attributed to the application

of fundamental traffic theory and the strategic placement of vehicle detection. Operationally, this manifests itself as an ultra-responsive strategy, dealing with the prevailing traffic conditions rapidly and effectively. Estimates suggest that at the end of 2008 there were approximately 3,000 sites equipped with MOVA (including linked MOVA implementations) with more than 250 per year being added to that.

TRL is now working towards the next version of MOVA, version M7. The aim is to have it ready in time to allow the manufacturers to announce it at TRAFFEX 2011.

MOVA M7 will have two major improvements and a number of minor enhancements. The first of the major features will be the saturation flow measurement. MOVA M6 has the ability to measure saturation flow, but has limited flexibility in its use. In MOVA M7 the measurements will be analysed statistically and the results placed in a dedicated log. The intention is that the measured saturation flows can be fed back into the MOVA configuration data, either manually, or for lanes selected by the user, automatically. Not only will this mean the user has potentially less work to set MOVA up,

it may also help further improve MOVA's operational efficiency.

The second major addition is what we refer to as Traffic Management Act (TMA) logs. The reference to the TMA is to reflect the need for Local Highway Authority Traffic Managers to monitor junctions and deal with problems. The logs themselves are being designed to extract as much information as possible about the operation of MOVA and to raise alerts whenever junction performance falls below user-set limits. It will be possible to import the logs into a spreadsheet to allow more detailed analysis. All of which should mean Traffic Managers are better able to fulfil their responsibility to the Traffic Management Act.

A number of other enhancements are also planned.

All in all it is anticipated that MOVA M7 will represent a significant step forward from the current version, which has found such significant success in the UK.

For more information please e-mail software@trl.co.uk

TOM FANNING



Tom Fanning graduated from UMIST in 2006 with a degree in Information Systems Engineering and joined TRL as a senior developer in January 2010.

His responsibilities at TRL include the further development of MOVA, aiming at the release of MOVA 7.

Tom joins us from an employment law consultancy in Manchester where he has been employed as lead developer on a suite of popular HR and H&S applications for about three years. Coming from a non-transport background, Tom is enthusiastic about the challenge of a new domain and is looking forward to getting involved in the widest variety of projects at TRL as possible, increasing his own experience and skills, and bringing a different perspective into the mix. Away from work, Tom is a Sheffield United season ticket holder, and likes international travel, generally fitting in as much SCUBA diving as he can, music, sports and culture. He is also looking forward to getting back into playing five-a-side again.

ELLIE GOULD

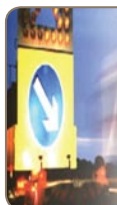


Ellie is a consultant with a background in sustainable transport, who joined TRL Software in January 2009 to strengthen our project management team.

Since joining TRL in 2006, Ellie brings a wealth of transport planning experience from the C4S division, where she contributed to travel plan guidance and health awareness projects, led transport policy and equality research and assessment, managed pedestrian environment research and analysis, led stakeholder consultations and managed research teams in the field.

Ellie has also spent considerable time using various software applications-bringing a user's perspective to our developments. Since joining the Traffic group, Ellie has managed a number of projects and associated software developments, including PERS, FERS and CarShare Online. Ellie is also leading efforts in Manchester related to freight activity and urban regeneration.

In her spare time, Ellie enjoys a social life with friends in far-flung places, which takes her to many parts of the UK and beyond. Ever the transport professional, Ellie has recently enjoyed a "busman's holiday" to the Far East, where she was able to marvel at mass transit in Hong Kong and Singapore.



If you would like more information on any of the issues raised in this issue please contact us. email: software@trl.co.uk or visit us at web: www.trlsoftware.co.uk

Member of
FAST
Promoting the legal
use of software



TRL Software
Crowthorne House, Nine Mile Ride,
Wokingham, Berkshire RG40 3GA
United Kingdom
Tel: +44 (0)1344 770758
Fax: +44 (0)1344 770864

