



## Using TRL software gets even easier - Lease it!

For many years TRL has sold its world renowned software, and many traffic and transport associated organisations continue to buy and use it. But there are many more out there who would welcome the chance to use the software without the outlay of the full purchase price. Now you can. As from the first of April, TRL is offering its software on a leasing arrangement as well as for purchase. This move has been taken alongside a review of the pricing structure for its Accident Analysis software (MAAP).

TRL recognise that many companies require the use of the software infrequently and often can not justify the cost of purchasing a particular package just for one project. The leasing package is primarily aimed at this area as well as those who may wish to try the software against other available products before committing to a purchase.

The new leasing option covers OSCADY, ARCADY, PICADY, TRANSYT, SafeNET and MAAP. For all these packages except MAAP the leasing option will cost £100

per program, plus £25 per month, for a minimum of two months, renewable in minimum six month periods. The £100 will be deducted from the purchase price should a purchase be required within the lease period. Software prices will not be increased this year and remain at £850 for a single site licence.

The leased version will be the most up to date of the software available at the time of commencement and will be provided with full maintenance.

MAAP will be leased on a yearly basis only, at a cost of

£1250 per year. Subsequent purchases following a lease period will receive a £500 discount for each year of leasing. MAAP will be provided in a standard format for use with STATS 19 forms and requiring MapInfo\* based maps, if mapping is required. TRL are happy to cost the configuration to the customers' own requirements with extra fields and back data and map conversion information.

The purchase price of MAAP has also been reviewed, whilst

*If you are interested in further details of any of TRL's software please contact the Software Bureau*



a single licence remains at £3500, additional copies have been reduced to £500 each. A corporate site licence is available covering 15 or more copies for the sum of £10500.

All prices exclude VAT, and do not include offers that may be applied from time to time.

\* MapInfo is a registered trade mark of MapInfo Corporation

### Transport Policy Model version 1.3 now available to Consultants

TRL are now taking orders for TPM version 1.3. There will be a free upgrade supplied to all existing TPM licence holders. Version 1.3 contains a number of significant improvements.

- The user can now specify values of time by journey purpose.
- The behavioural price elasticity response parameters can now be specified by the user for car fuel price, bus fare, and rail fare.
- Refinements have been made to the graphical user interface to improve ease of use.
- Enhancements have been implemented in the parking module for parking search distance and search time.
- Fuel consumption and cost parameters are now accessible to the user.



TPM is available for sale to Local Authorities, Consultants, and Educational Establishments. Academic institutions benefit from a special Educational Licence. For a price list and order form, please contact the TRL Software Bureau.

### CONTRAM 8 Release

The new Version 8 of CONTRAM has been released. This incorporates two major new features: an Intelligent Transportation Systems (ITS) module for modelling the effect of incidents and real-time information systems, and a new matrix estimation tool for updating trip matrices to reproduce observed time-dependent flows.

Modelling of ITS requires the ability to simulate driver behaviour and responses which go beyond conventional equilibrium assignment. The ITS modelling features in CONTRAM allow the user to model the effect of an incident when drivers' route choice is affected by external information sources, such as VMS signs or observation of queue lengths. This can be used, for example, to test a number of VMS signing strategies in order to determine which is best at reducing the extra delay caused by the incident.

The new Matrix Estimation module addresses the shortcomings of traditional maximum entropy solutions in a dynamic context by giving the user control over weights ascribed to link counts and prior matrix cells or trip-ends, as well as being able to impose realistic limits on the amount by which matrix cells may change.

*For further details please contact  
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# Advanced SCOOT Features

The “SCOOT” urban traffic control system is well known for its ability to adapt and respond to traffic fluctuations in order to provide minimum traffic delay. Less well known are its more advanced features, such as bus priority, gating and emissions estimation. These are the subjects of three new DETR Traffic Advisory Leaflets: 7/00, 8/00, and 9/00.



## Active Bus Priority in SCOOT

Active bus priority has been available in SCOOT since version 3.1, and is a major improvement over passive priority. Passive priority works by giving a higher priority to links specified as bus routes, but as all vehicles using the link will receive the benefit, the level of priority that can be given is small.

With active priority, buses are detected individually, either by selective vehicle detectors (SVD), or automatic vehicle location (AVL) systems. Signal timings are then optimised to benefit the buses, either by extending the current green stage until the bus passes (an extension), or by shortening successive stages to decrease the waiting time (a recall). It is also possible to provide a higher level of priority for late running buses. Benefits to buses can be as much as 50%, but for more highly saturated junctions the reduction in delay is nearer 5 - 10%.

## SCOOT Gating

Gating is a technique used to control the flow of traffic into sensitive areas where it is important to avoid serious congestion. Traffic queues are then effectively relocated to more acceptable areas. Gating can be used to assist buses by keeping queues away from bus routes, or by relocating queues to roads with bus lanes to enable buses to 'jump' the queue. It can also be used to benefit pedestrians by moving vehicle emissions due to congestion away from city centres.

## SCOOT Vehicle Emissions Estimation

Version 4 of SCOOT introduced estimates of pollutants emitted from vehicles within SCOOT controlled areas, based on link lengths and delays. Estimates are available for individual links or aggregated as required. As well as assisting in monitoring emissions in urban areas, the data can be used to develop and evaluate strategies to reduce pollution in sensitive areas, such as, for example, using SCOOT gating as described above.

*More information on all of these subjects can be found on the SCOOT website ([www.scoot-utc.com](http://www.scoot-utc.com)), or from DETR Traffic Advisory Leaflets ([www.detr.gov.uk](http://www.detr.gov.uk)).*

*Andrew Kirkham  
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## Gloucester - Safer City Project

TRL has provided advice and undertaken the monitoring of the five year project, 'Gloucester, Safer City' on behalf of the Road Safety Division of DETR. This project, a unique strategy, is now nearing completion with the 'After Study' of the effects continuing for a further year. The details of over 1000 injury accidents across the city were studied, to determine the main causes of accidents, where they occur and to establish who were the victims.

A desired road hierarchy was agreed that aims to provide a clearer, more distinct network, to put traffic onto the right roads and away from residential areas. A consultative group of 46 business and voluntary organisations meet four times a year to discuss the progress of Safer City, and to establish what they can do to improve road safety. Four multi-agency working groups were set up, with members drawn from a wide range of organisations, such as the Emergency Services, Health Authority and a bus company. These groups cover education, data, speed management and consultation.

Almost £5 million has been spent on road safety improvements in the city. The vast majority has been spent on area wide traffic calming and includes items like vertical features, bus and cycle lanes, and new pedestrian facilities. SCOOT has also been used in this project. Annual surveys of residents' views in Gloucester, show that people feel that road safety has improved during the project.

The number of road casualties in Gloucester has fallen by an average of 7%. This amounts to 35 fewer people injured in road accidents every year, since the project started in 1996. There has been up to a 60% reduction in casualties at those sites treated by Safer City and this together with better enforcement, education and publicity has contributed towards this very welcome overall saving. However, it will not be until the end of the project that a more confident assessment can be made. It is hoped that this strategy will provide a model that can be applied to other towns and cities in the UK.

*David Webster  
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# MOVA controlled traffic signals – are you getting the best out of them?

“MOVA” has been around for a long time now, and IF it is set up correctly will result in very efficient signal control. Once the data-set is correct and in place, no further changes are needed even when traffic flows change over time. It is particularly efficient in controlling junctions with flared approaches, where the saturation flow rate across the stopline is not constant during the green time.

An earlier safety study indicated that MOVA reduces injury accident frequency by about 30 percent at high speed (SA/SD sites) although the study was only on a small scale. A much larger study is currently taking place, to confirm or deny the provisional result – watch this space!

The latest version of the software (MOVA 4.0) includes bus priority as an option, so the

extra efficiency obtained from the use of MOVA can now be used for the benefit of buses, rather than for all traffic..

TRL’s experience of surveying and checking dozens of MOVA sites over the last few years (including a large number during the Y2K upgrades) has shown that many sites are not set up correctly, and some have serious errors. Traffic congestion (and irate motorists’ com-

plaints) and possibly the accident rate could be reduced to a greater or lesser degree by simple remedies.

In addition to offering a full MOVA-installation service, TRL can check your MOVA system and data-set to make sure it is doing what it should. In many cases a site visit is not necessary – many errors can be picked up just by looking through the paperwork and/or

dialling up the site. All we need is a junction diagram, a copy of your provisional data-set, and the Controller Specification sheets. If a site visit is not required, the job could be completed in a day (including emailing a short report to the customer) and the charge would be £350 + VAT.

**Contact : Peter Webb,  
Tel: 01344 770076  
Or the Software Bureau**

## FAQ

Welcome to FAQ. This is a new section of TSN which we plan to use to describe a variety of ‘Frequently Asked Questions’, starting off in this edition with some explanations of some of the more puzzling warning messages which you may come across while using our software.

**One of the following messages appears when data is run: “Error: Unit has neither been OPENed nor preconnected” or “Salford run-time library: Stack overflow”.**

Both these messages can be caused by having the ‘wrong’ version of a DLL file on your system. OSCADY, ARCADY, PICADY and TRANSYT all use a file called SALFLIBC.DLL, and there should only be one copy of this file on your PC - usually in the c:\windows\system (or equivalent) folder. The current version, as supplied with ARCADY 5 and TRANSYT 11, is 1.45MB in size and is dated 29/07/98. If the version on your PC is older than this, and you are using Windows NT or 2000, then you may find that the “Stack overflow” error occurs.

Conversely, if you are using ARCADY 4 or PICADY 4 on a machine which has subsequently had ARCADY 5 or TRANSYT 11 installed, then the “Unit has neither been opened nor preconnected” error can occur. In this case, the DLL is up to date, but you also need updated versions of the main ARCADY 4 or PICADY 4 programs in order to utilise it. (OSCADY 4 is unaffected.)

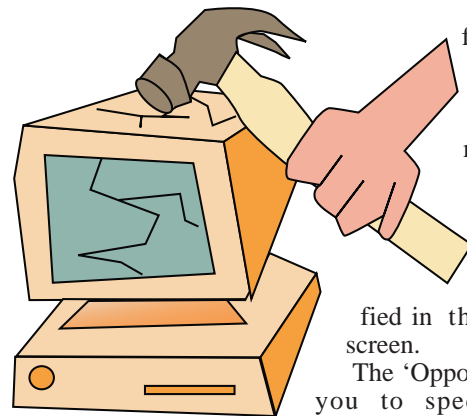
Downloads for all three files (SALFLIBC.DLL, ARCADY4.EXE and PICADY4.EXE) are available on our website or via email on request. If you have now upgraded to ARCADY 5 and PICADY 4.1, and no longer use ARCADY 4 or PICADY 4, then you should not experience any of these problems.

**In ARCADY, the message “The roundabout is non-circular; accident frequencies cannot be calculated” appears.**

This message indicates that a junction does not satisfy the requirements necessary to carry out Accident Analysis. The inscribed circle diameter, as entered in Geometric Data for each arm must be at least 10m greater than the central island diameter, as entered in Accident Data. In other words, the road width at each point around the roundabout must be at least 5 metres. The phrase ‘roundabout is non-circular’ maybe confusing, but is indicative of the fact that this message appears, more often than not, when a roundabout isn’t circular, i.e. the width of the circulating carriageway within the proximity of a particular arm is less than that of the other arms.

**In OSCADY, the message “Arm x: Warning on CT14: Opposed right-turners - CT08/CT14 contradiction” appears.**

The meaning of this quite common message is actually a lot simpler than it sounds. The program is simply picking up on the



fact that a lane specified as having opposed or non-opposed right-turning movements on the ‘Geometric Data/Opposition’ screen does not match up with the green signal movements specified in the ‘Signal Data’ screen.

The ‘Opposition’ screen allows you to specify right-turning movements as being opposed by traffic from the opposite arm turning left and/or right. When to apply these are explained in the OSCADY Application Guide (Section 4.4.1.9). In addition, OSCADY assumes that straight ahead traffic from the opposite arm will oppose right-turners if/when there are any, unless you tick the “Right-turning vehicles never opposed” box. This allows different sorts of junctions to be set up, but all subject to the assumption that if you specify a lane as being opposed, then the relevant lanes on both the opposed and the opposing arm must be on green at the same time sometime during the cycle. Otherwise, there is a ‘contradiction’. Alternatively, if you say a lane is ‘never opposed’ OSCADY will not expect the right-turners and opposing straight ahead traffic to be green at the same time.

**Generally, this message should not be ignored.** However, there are two exceptional circumstances where it may be ignored:

- (1) Where a dummy arm is being used to model, say, a single arm of a signalised roundabout. In this situation an arm is specified that contains no flows and so it does not matter whether or not you specify it as never being opposed or not – the only difference being that if you don’t say that it is never opposed the above message will appear. The results will be the same.
- (2) The message is a ‘Warning’ message rather than an ‘Error’ message so that OSCADY retains the flexibility to attempt to model peculiar junction designs.

**Jim Binning,  
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## COURSES, SEMINARS & WORKSHOPS 2001

### TRANSYT WORKSHOP 2 DAY WORKSHOPS IN MAY & OCTOBER

1st Course Date 15-16/5/01  
2nd Course Date 9-10/10/01

Course Fee £500  
(£450 Maintenance Holders)

Places are limited  
(9 delegates for  
each course) so if you are  
interested please register  
now to avoid disappointment

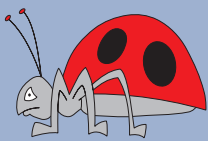
All prices exclude VAT

NEW DATES FOR  
FUTURE COURSES ARE  
TO BE ANNOUNCED

PLEASE CONTACT  
DAWN GOULD ON  
TEL: 01344 770399  
FOR MORE INFORMATION  
IF YOU ARE INTERESTED  
IN ANY OF  
TRL SOFTWARE COURSES

CUSTOM COURSES  
CAN BE ARRANGED  
ON SITE AT  
YOUR COMPANY

## BUG BOX



No new bugs to report.  
Existing bug fixes  
are ongoing.  
More info next time!



## MTV at DETR PRESS DAY

The DETR held a Press Day at TRL aimed at getting the message of the Government's 10 Year Transport Plan to a target audience that was typically mass market, to raise greater awareness.

Journalists attending were from magazines such as What Car, Fleet News, and Caravan Club or freelancers writing for the Telegraph, Express, Red, Good Housekeeping and Saga magazine. Items presented included, Travel Information Highway, Journey Time studies, GPS systems and MTV (The Motorway Traffic Viewer). Jaguar also attended to demonstrate their Intelligent Cruise Control.

The picture below shows Carole Dixon presenting MTV, a tool for the monitoring, evaluation and validation of motorway systems and traffic behaviour, to Dave Motton (left) from What Car and Simon Harris (right) of Fleet News.



## And finally - here is a selection of comments from our friends overseas!!!

"I'm glad to receive your warmly email so quickly today. To be frank speak, I admire you with high efficiency."

"Hello, and nice to meet you. Thank you for your cooperation. Can I ask you a favor?"

"T'11 done the payment by my creditable card."

"I am glad you got my massage."

"I would like more information about this pioneer and famous TRL software."

"Dear Excellency Manager of TRRL, - I am revering you as a sophisticated experts had great influence on transportation principles at the scale of the world. Please answer me this is very important to me, my career in your hand"

"I hope I am not Teasing You But I Need Your Answer About TRANSYT 11 Very Soon."

## CURRENT PROGRAM VERSIONS

ARCADY 5	V5.0 AA/1.0
PICADY 4	V4.02 AJ/2.1
OSCADY 4	V4.01 AC/2.1 <i>(INTERNATIONAL versions available)</i>
TRANSYT 11	V11.0 AC/1.1
TPM	V1.2a
STM	V2.0a
BUNDLE	V 2.0
MOVACOMM	V 2.6.0
MOVASETUP	V 2.3
CONTRAM8	
MAAP for Windows	4.0
SafeNET	1.02
PARC 2M & PARC 2P	

## Who's Who in Traffic Software



**Robin  
Hutchinson**

Robin joined TRL in September 2000 as a Project Manager in the Traffic & Transportation consultancy.

Before joining TRL he was a senior engineer for a London based consultancy and prior to that a project engineer at the TCSU. Robin is experienced in traffic engineering, area traffic management and AIP schemes. He has a considerable amount of experience in traffic signal design, specification, modelling and implementation and is particularly interested in bus priority systems.



For further information about TRL software please contact :

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