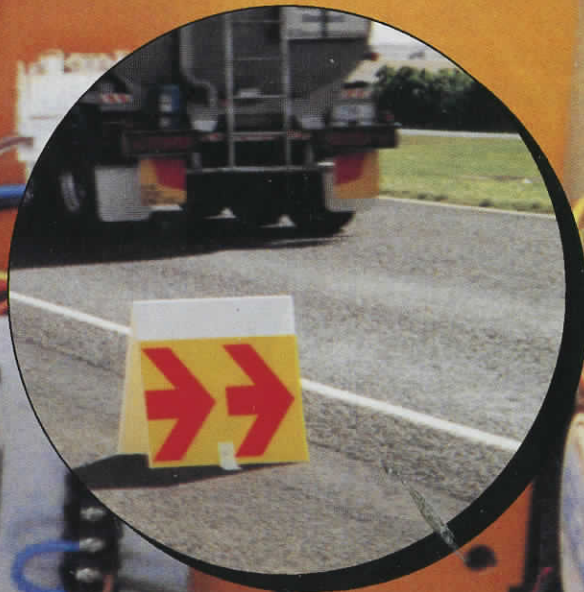
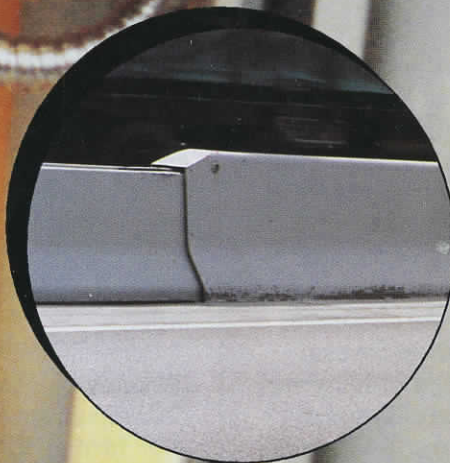


The 1991 Innovation Awards



The VIC ROADS Innovation Awards

INNOVATIONS
COME FROM
PEOPLE.
THEY ARE
CONCEIVED,
DESIGNED AND
IMPLEMENTED
BY PEOPLE
WHO STRIVE FOR
IMPROVEMENT
AND ULTIMATELY
FOR EXCELLENCE

There is a saying in business, "You can't stand still."

Maybe of all the sayings in business this is the truest, the simplest, and yet the most profound.

You can't stand still. You can't plan to go on doing things the way you do them now – no matter how well they seem to work and no matter how much profit they are making.

If you rest on your laurels others will pass you by as they improve their performance.

Chief Executive Reg Patterson in announcing the winners of the VIC ROADS Innovation Awards for 1991 said: "Innovation is important."

"As we face the challenges of the future, we must develop new and better ways of doing our jobs. The solutions of the past, which have served us well, are not necessarily relevant to our needs today and tomorrow. As individuals and groups within an organisation we must increasingly become more creative in our daily work – more innovative."

"As an organisation, over the years, we have built a sound history on not resting on our laurels. As we move forward we know the importance of becoming more creative in our daily work."



The Innovation Awards were established in 1987 to encourage and reward innovation in the pursuit of excellence, effectiveness and efficiency.

The scheme has three levels of recognition, in merit order:

- Innovation Award
- Highly Commended Innovation
- Commended Innovation

In 1991, 41 nominations were received from many different areas of the organisation.

Many of the nominations were for field and depot staff and the balance for office-based staff. A complete list of nominations is provided to illustrate the diversity of innovative thought in VIC ROADS, and to allow people to follow up the good ideas of others.

Of the 41 nominations, six projects received awards.

Graham Hill, left, and Lindsay Clay being congratulated by the Minister for Transport, Peter Spyker.

The projects involved 15 people. Some were for pieces of equipment that had been developed to quickly and safely do work which had previously been time-consuming, been very hard work for those concerned or had aspects of danger which had too often resulted in injuries.

The awards and commendations celebrate a considerable range of progressive thought and it is with considerable pleasure and pride that VIC ROADS presents these 1991 award winning project.

THE 1992 INNOVATION AWARDS SCHEME IS OPEN TO ALL INDIVIDUALS OR WORK GROUPS IN VIC ROADS – FOR ANY INNOVATIVE WORK WHICH HAS BEEN SUCCESSFULLY APPLIED.

THEY SHOULD BE COST-EFFECTIVE OR SIGNIFICANTLY IMPROVE QUALITY AND THEY SHOULD DEMONSTRATE EXCELLENCE.

FACTORS SUCH AS QUALITY, TECHNICAL OR WORK IMPROVEMENT, SAFETY, IMPROVED CUSTOMER SERVICE AND PROMOTION OF VIC ROADS ARE ALL IMPORTANT.

NOMINATIONS FOR THE 1992 AWARDS SHOULD BE MADE BY 31 JANUARY 1992. FOR ANY FURTHER INFORMATION CONTACT MARY ARMOUR, 3RD FLOOR, 60 DENMARK ST; ON 2909.

Lindsay Clay ■ Graham Hill

Northern Region

Highly Commended
Innovation

By off-site precasting of road and pedestrian bridge components a substantial reduction in construction time and cost is now gained. This new system also increases the quality of work and gives safer working conditions than the traditional method of cast-in-place construction.

Lindsay Clay says he was in the fortunate position of being involved in all steps of getting bridges built. From liaison during design stages to manufacturing of precast units to construction of the bridges.

Graham recalls that for many years Lindsay had a concept in the back of his head that would simplify the existing system. The old system just wasn't integrated.

For example, existing designs and construction methods created difficulties out on-site, they were time consuming and greatly

added to the overall cost of the structure. Also, with the advent of bigger cranes it was possible to do the job differently and more efficiently – “the time had come for a new concept.”

Lindsay mentioned to John Coles, who was Regional Manager, that we could change the process.

“He said, don't just dream it, do it.”

“We got a lot of help from Bridge Design especially Roy Fisher.”

In order to test the system they had to hunt for a customer. Huntly Shire agreed to act as a guinea pig. Six months later a small, single lane, three-span bridge was a success and from then on it just snowballed.

Graham remembers when Bendigo City gave them a go. They built a fairly large bridge with four people in seven weeks – private



enterprise had quoted 18 weeks and at 50 per cent more cost.

Lindsay started as an engineering assistant and has been with VIC ROADS for 26 years. Now, he is Team Leader, Works, for Northern Region.

He and Carole have two children, Helen and Susan who are studying.

Lindsay is keen on sports. He plays tennis and golf and is a “Demon” supporter. He also has an interest in environmental issues and enjoys bushwalking.

Graham has been with us for 24 years, 20 years in the Drafting Office and four years in the Precast Yard. All his time has been spent in Bendigo and he thinks it is a great area to bring up a family. He and Diane have three children.

Graham is a mad keen botanist and bushwalker when

he's not involved with bridges. At the moment he is working on a botany survey of the Whipstick Forest Park which has a unique mix of desert and hill vegetation.

Graham and Lindsay with one of their bridges



FOR THE
DEVELOPMENT
OF A PRECAST
BRIDGE
ERECTION
SYSTEM



Highly Commended Innovation

Brett Wilson ■ Denis Siroky ■ Peter Serle

Plant and Supply - Glen Waverley

FOR
DEVELOPMENT OF
AN EMERGENCY
SLIDING GATE IN
A CONCRETE
MEDIAN BARRIER

On the South Eastern Arterial there had been a series of accidents – severe delays to emergency vehicles as well as massive traffic delays were caused by the restricted access to some areas of the arterial road.

The Minister for Transport directed VIC ROADS to find a way for emergency vehicles and banked-up traffic to bypass the accident by using the other side of the road.

Ideas to make a gate in the concrete crash barriers by lifting or sliding them sideways were soon discarded.

Brett says, "Within half an hour Denis and I had the concept designed. The engineers had been trying to find a way to shift four tonnes of concrete. We said you don't do that, you make a shell out of steel and slide it back over the concrete wall.

"We tend to work a lot on team effort. We do a bit then others put in what they are good at."

So the concept looked good – it was then over to Peter and Denis for the detail designs. Brett says that what made the detailed designing so hard was "the gate can sit there for months or years, unused, but in an emergency it has to work on the day."

Denis is unashamedly proud of his workmates "we have the best team in the whole of VIC ROADS – they can do almost anything."

The sliding shell was an elegant solution, he says, "but a tricky one." The calculations of the strength needed to withstand a vehicle impact were so complex very few computers in Australia have the power to handle them.

This was handled by Vipac Engineering Scientific of Port Melbourne.

Peter was involved with the AutoCAD drawings which were converted for calculations of a 2.5 tonne vehicle hitting the gate at 25° at 100km/h.

Some minor adjustments and it was in production.

"We were concerned, too," Peter says, "with locking the gate onto the road surface.

"We sat down to work out how to do it better and came up with the idea of putting it onto a couple of RSJ's (large metal beams), then concreting them in

place.

"That halved the installation time."

Anthony Wregg, Brian Davies and the team in the Technical Services workshop had the manufacturing under control in a matter of weeks.

Denis came to VIC ROADS 11 years ago. In his job as Design and Advisory Services Engineer

A section of the concrete median would be replaced by a similarly shaped section manufactured from high tensile steel.



he enjoys pulling strings to see things happen on time and winning jobs for us against private enterprise – these jobs involve specialised machines such as fire-fighting equipment, ferries, and road/rail vehicles.

His work and his hobby, both, are computers. He and Vera have four children.

Peter is a Supervising Draftsperson: he was worked for us for 14 years. With Vicki and their four children he enjoys camping – last summer they camped the trip to Perth and back. Peter likes basketball and crosscountry skiing and is “back playing basketball in the veterans.”

Brett, Peter Spyer, Denis and Peter.



Brett and Margaret have two children. He plays a bit of golf when the gardening allows and maintains an interest in engineering design and computers.

Brett started as a design

engineer 26 years ago. He is now Manager Plant Hire.

“In most design areas you become a specialist on clutches or engines or whatever. Here, you have such a wide range of work – I just stayed on.”

Over the years he has been involved in designing frangible supports and gets satisfaction from seeing them damaged without much in the way of glass or vehicle parts lying about.

He has one unfulfilled working desire: “I’ve always wanted to drive through one to find out how it works.”

In an emergency the steel section can be moved back over the adjoining concrete section by means of an electrically driven gear box operated either at site or from the traffic control room. The gate operates in a 24 volt system for increased safety and is also capable of being operated manually.

The emergency sliding barrier is now patented in numerous countries and negotiations are in progress to sell the idea to the USA.



Commended Innovation

FOR
DEVELOPMENT OF
FIBRE OPTIC
CABLES AND
REMOTE LIGHT
SOURCES FOR
MAST ARM
TRAFFIC SIGNALS



Mast arms are the curved poles which hold traffic signals high above intersections. In the normal process a blown globe, which happens all too often, has to be replaced by bringing in a truck with a lift platform. Traffic would be disrupted. At least two people are needed.

A costly change for a light bulb.

Barry was given the job of finding a solution. He took the globes out of the signals and put lenses in their place. The globes, or light sources, are now in an accessible position at ground level where they can be quickly and easily replaced. The light is taken

Barry Jan

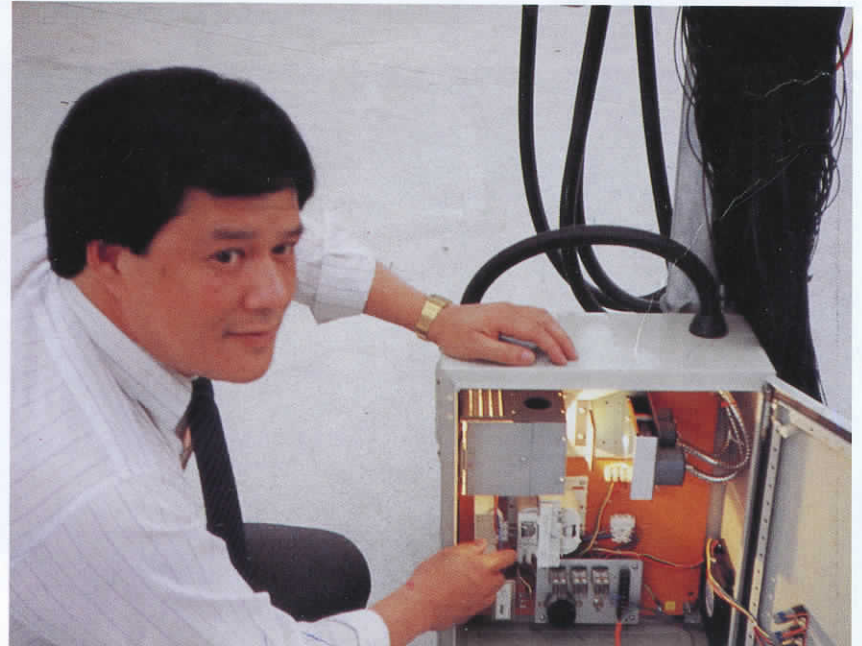
Traffic Signals Installation and Maintenance

up to the lenses in the signals by fibre optic cables.

Barry Jan is making a habit of winning awards for innovations. His variable speed signs and retrofit package for traffic signals last year makes his record three awards in two years.

He has several ideas on the go, and they sound very promising. It could well be he will be in for a trifecta.

Barry came to VIC ROADS in 1973. He and Katie have four young children - if they beat his time on the computer he cools off in the vegie garden.



LEFT: A mast arm signal.

RIGHT Barry with the control box which distributes the light and above the pixel lenses (at right) being tested against standard lights.

Donald Baird

Port Campbell Patrol

Retaining walls on the Great Ocean Road are Big Trouble.

The terrain is very steep, so putting fills across gullies and cuts into hillsides – short of cutting the hill almost completely away – generally require retaining walls on steep inclines.

If water soaks the land the fill is likely to give way, causing road closures and extremely expensive work to build retaining walls.

Enter Donald Baird.

His techniques of containing 16 land slips in the Otway mountains, with low cost materials and without the need for road realignments have been effective.

Works Manager at Warrnambool, David Lynton, has seen Donald working; improvising with old cables, discarded guard rails, lumps of second hand bridges and old railway line – whatever material he could scrounge; “He used a variety of discarded lengths of metal to stitch hillsides together – it certainly was low-cost renovation.”

Donald was a fellow who got things done. He worked for VIC ROADS for 34 years, was inventive and courageous and he was proud of his retaining walls, “The first wall I built was 15 years ago and is still standing as solid as a rock.”

Sadly, Donald died from cancer, early this year.

Don, in his private life, was a keen shooter, fisherman and diver. Amongst his achievements in this field was, with friends, the finding of the Loch Ard wreck.



TOP: Don with his wife, Heather, receiving a service award from Reg Patterson.

LEFT: South Western Region Manager, Col Kosky, was proud to accept the award for Don.



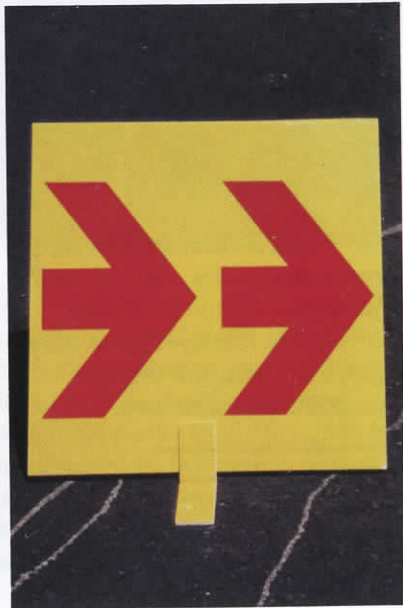
FOR THE
CONSTRUCTION
OF RETAINING
WALLS ON THE
GREAT OCEAN
ROAD

Commended Innovation

FOR THE
CONCEPT AND
DEVELOPMENT
OF PORTABLE
SIGNS FOR
ROADWORKS

"We threw many ideas into the pot and talked them over." The one that came out trumps was a lightweight sign to protect road workers.

"In rural areas," David says, "when they go to a sizeable job, they often need a truck just to



David Bailey ■ Bob Carr ■ Alan ■ Brian Rowe ■ Jim Wight

Blythwood Grange Syndicate

carry the signs.

"The weight is a major factor in restricting putting out signs on jobs."

Mike was anxious to work on something that concerns him in his normal working world, accidents at roadworks.

"We felt we needed something that had a practical nature – and would appeal to people in the field."

"It was the perfect product, no problems that weren't insurmountable. We quickly abandoned our other ideas."

Half the exercise was solved when Bob Carr came upon Corflute (corrugated plastic similar to cardboard) which is cheap, durable, very light and can be screen printed easily.

The next step was to find a way to get the sign to stay in place. Alan sums up the solution, "We came up with the idea of tags. You just nail them down."

The concept has many potential applications. Tom Flintoff's team at Plant Branch has taken on the marketing of the idea.

Jim Wight joined us 30 years ago and is now seconded to Service Improvements Registration and Licensing. In between he spent eight years as Executive

Officer, Department of Law in Papua New Guinea. He and Linda have three adult children. He relaxes with Tai Chi and cryptic crosswords.

Mike Hull came to us five years ago after a varied career in road safety and behavioural science. He is now Project Leader Driver Training and Licensing. Mike has been roped in by his kids as deputy manager of their basketball team. He has a message for Reg – "If they paid me enough, I'd dearly like to go back to flying."

Brian Rowe is Manager Transport Safety Services (Western). He has been with us for 24 years. He and Heather and their children Gregory, Ashley and Hannah have a small farm. Brian is involved with the Country Fire Authority – and the local primary school council.

Bob Carr joined in 1972, from the Board of Works, and went to work on the West Gate Freeway. He is an engineer. He and Prue have two children, Sarah and Joel.

He says "We came from Blythwood Grange with something we quite enjoyed, the opportunity to mix with people, move around the organisation and a great product under our belt."



Mike Hull shows just how portable the new signs are – you really can carry them under your arm out to the boot of your car.

Alan Cookson, as an apprentice fitter and turner, joined us on 15 January 1953. He is now Service Centre Manager, Western Region. He has noticed how the organisation has changed over time: "We are now

Cookson ■ Mike Hull

doing a lot of work for external clients which would have been unheard of not many years ago.

“Our work for Telecom, in particular, compares more than favourably with what they can get from private enterprise.”

Alan and Alison have four children. He says he is an “average sort of guy,” interested in cricket and scouts and country life, and “Collingwood just happens to be the best team of all time.”

David Bailey has been with us for seven years, coming from construction maintenance with London Borough Council. He says the work here has a lot of similarities, “Of course the climate is better and people’s attitudes are a lot more positive.”

At present he is in Corporate Planning. He and Jenny have two boys and spend a lot of time with them waterskiing. He gardens and plays with computers.



BELOW: David, Bob, Jim, Peter Spyker, Brian, Mike and Alan – their awards are heavier than their signs



Commended Innovation

FOR
DEVELOPMENT
OF A HERBICIDE
SPRAY BAR

"We were spraying herbicides off the back of a truck. I thought there must be a safer way of doing it, with less contact with the chemicals." Then John went to a poisons course which gave him a few ideas. He approached his boss, Bill McMillan, who with the help of Roadmaster Ray Taylor gave the go ahead.

"Ugo was called in, we gave him a list of components and our requirements. When he came back, we just fitted it to the truck. It worked, straight off."

It seems the concept, from idea to spray, worked like clockwork. Ugo says "John just described what they wanted, I hunted around, found some bits available, and sorted out the faults.

"It has quick release couplings – you just have to slide it on, and a switch on the dash. It's as simple as that, really."

The new spray means one person can do the job.

Because the spray can be set precisely it doesn't have much drift, therefore it uses a lot less chemical. This also greatly cuts the trips back to fill up the tank.

John has been with us for four years. He is into fishing and bushwalking. He and Leocadia have two children Allister 6, and Amelia 2.

John Davey ■ Ugo Diiorio

Dromana Patrol ■ Plant and Supply –
Glen Waverley

Ugo started with us 20 years ago as an apprentice. He plays squash and likes working around home.

Both are pleased with their awards. John says a bit of encouragement goes a long way and Ugo thinks an award like this is a bit of a buzz.



LEFT: Ugo Diiorio
ABOVE: John Davey with the
adjustable height spray bar.

List of Award Nominees

NOMINEE

1. **John Davey** Dromana Patrol
Ugo Di Lorio Melbourne Service Centre
2. **Brett Wilson, Denis Siroky, Peter Serle** Plant and Supply Dept
3. **Ken Mathers, Bryan Weinberg**
Western Ring Road
4. **Jim Trajcevski, Les Wyszynski**
Western Ring Road
5. **Bill Bell** Technical Resources
6. **Lindsay Clay, Graham Hill**
Northern Region
7. **Peter Gran**
Bridge Design
8. **Jeff Bennett** Eastern Region
John Bentley Eastern Service Centre
9. **Felicity Finlayson, Frank Grose**
Metro North West
10. **W Holtrop, A Kemp**
Materials Technology
11. **Geoff Hughes**
Registration and Licensing
12. **Kevin Quirke** Plant and Supply
13. **Paul Donovan** Materials Technology
Alan Loughron Plant and Supply
14. **Bryan Weinberg, Graeme Nelson**
Western Ring Road
15. **Ron Williams** Central Metro
16. **Eastern Projects**

INNOVATION

- Herbicide spray bar
- Emergency sliding gate
– median barrier
- Use of surplus material
to induce settlement
- Package of traffic control
measures for Tullamarine Freeway
- Rowlock
- Precast bridge erection
system
- Device to lock grated
drainage pit lids
- Device to eliminate lifting of heavy bags
of sample material
- Recycling of
waste concrete
- High flash point
cutters for bitumen
- Lifetime cards for
Multi Purpose Taxi Program
- Computerised telephone
number location program
- Remote control for
box spreaders
- Use of pilot tunnel
for cartage
- Use of recycled crushed
concrete rubble
- Night time asphaltting
17. **Punt Road Widening Team**
 18. **Chau Le**
Traffic Operations
 19. **Rex Blanksby, Syd Pitman**
South East Metro
 20. **Eastern Projects**
 21. **Greg Crick, Ross Arnup**
Bacchus Marsh Patrol
 22. **Donald Baird**
Port Campbell Patrol
 23. **Stuart Tooley**
Operations Support
 24. **David Bailey, Bob Carr, Alan Cookson, Mike Hull, Brian Rowe Jim Wight**
Blythewood Grange Syndicate
 25. **Incident Management Team**
Westgate Base
 26. **John Symeopoulos**
Central Metro
 27. **Barry Jan** Traffic Signals
 28. **Peter Boast** Traffic Signals
 29. **Barry Jan** Traffic Signals
 30. **Barry Jan, Greg Studwick**
Traffic Signals
 31. **Barry Jan, Peter Boast**
Traffic Signals
 32. **Barry Jan** Traffic Signals
 33. **Ken Doyle, Graham Fordham Ramon Figueroa** Plant and Supply

- Variable illumination system
for enclosed roadways
- Software package TDD
(Time vs Distance Diagram)
- Sign support for erection and dismantling
of direction signs
- Recycled plastic bollards
- Self-contained trailer
- Retaining walls for Great
Ocean Road
- Alerting device for permits
section
- Portable roadworks signing
package
- Service RACV type call-outs
- Incident management plans
- Westgate variable speed signs
- Train warning systems
- High visibility "Stop/Slow" bats
- Vehicle actuated control signs
- Speed activated warning signs
- Fibre optics for traffic signal mast arms
- Jig/bracket to support a
drill and cutting tip

List of Award Nominees cont.

NOMINEE

- 34. John Medley** Warrnambool
- 35. Lex Paton, Ken Batten**
Warrnambool
- 36. George Randall**
Warrnambool
- 37. Stuart Porter**
Warrnambool
- 38. Doug Westwood**
North East Region (contract owner/
driver)
- 39. Tuan Hoang**
IT Division
- 40. John Slogeris, Chris Walker**
Road Safety
- 41. BST and Linemarking
Employee Involvement Groups**
South Western Region

INNOVATION

- Improved stores area procedures
- Quality service management
Project No. 94
- Replace round poles with
square poles on traffic signs
- Separate in-trays for memos,
circulars, etc.
- Device to attach aggregate
spreader to truck
- Development of PC based
"Workstation menu system"
- New systems for accident
and location databases
- BST and linemarking
co-ordination

