

Bringing Bikers Out of the Blindspot

Case Study

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Original problem in Devon



- In 2002, motorcyclists made up around 25% of all road fatalities in the County despite only making up 2% of traffic
- 100 motorcyclists were either killed or seriously injured



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Breakdown of rider types



- Leisure riders
 - Leisure riding attracts large amounts of riders to the region
- Commuter / work related riders
 - Social exclusion factors / rural communities
 - Poor public transport links
- Social riders
 - Similar characteristics to commuter riders



Bringing Bikers out of the Blindspot



• Launched in July 2003



• Aim of the campaign: "To encourage the safe sensible use of motorcycles"



Partnership approach



- Devon & Cornwall Police
- Local bike groups
- Dealers / trainers
- National groups MAG, BMF etc.
- Individual riders



DEVON COUNTY COUNCIL TRAVELWISE

Data led campaign based on 3 stages

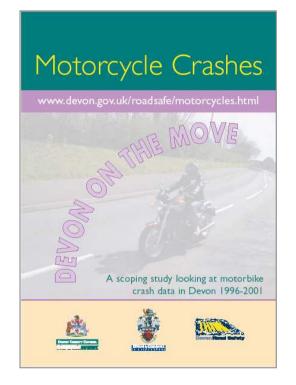
- Research & consult
- Target & deliver
- Audit & review



Research & Consult



Report allowing Devon County Council to understand better the causation factors for motorcycle collisions in the area



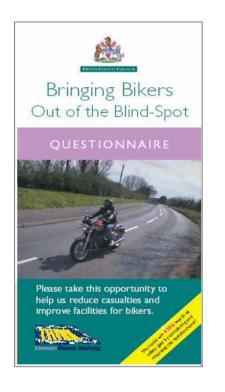


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Research & Consult

- Biker consultation form available in paper format and on-line version
- Approximately 500 forms completed





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Research & Consult

- On-line biker forum
 - 70,000 hits
 - 350 contributions
 - Over 60 contributors

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Analysis of crash locations:

- Urban roads: conflict between bikes and other vehicles
- Rural roads: single vehicle collisions where the rider has lost control and left the carriageway



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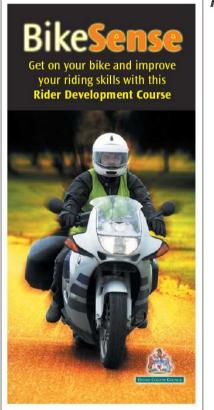
Example of results from the Research & Consult process



- Better training options for all rider types
- KSI problem for riders in 30 45 year age group
- Concerns over road surface, particularly diesel spillage and manhole covers
- Needs for bike sensitive road designs
- Bike awareness education for car drivers
- Specific crash problems in rural and urban areas
- Use of bus lanes for motorcyclists
- Create a better image for motorcyclists



- Training: Rider Development Course
 - Flexible training depending on needs
 - Affordable
 - Consultation has helped make the course effective
 - Accessible





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• Driver awareness



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- Urban route strategy
 - Two main problems highlighted as causation factors:
 - Vehicles turning right into the path of bikers
 - Vehicles emerging from junctions
 - Signs to be located in areas where bikers have previously experienced problems
 - Ongoing consultation phase allowing riders to suggest roads which they want signing





• Urban route strategy





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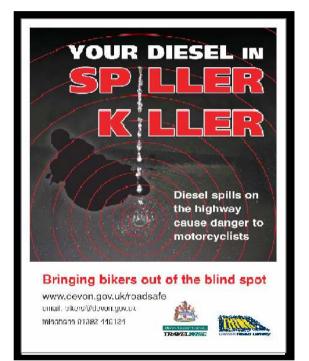


- Rural route strategy
 - Leisure riding attracts large numbers of riders to the region and some routes are promoted as a challenging run
 - 33 riders killed or injured on the A377 in the last 5 years
 - Mixed bag of collision types, rider profiles and times of day and year
 - Strategy aimed at all road users, not just bikers
 - Signs located at collision site clusters







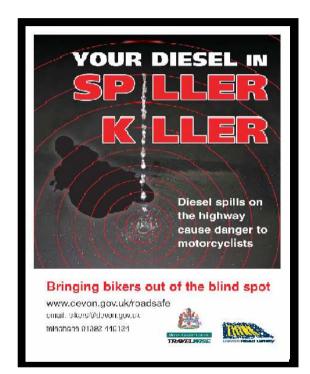


- Raise the awareness of the problem
- Encourage the reporting of diesel spills
- •Education drive aimed at potentially culpable parties



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- •VOSA
- Filling stations
- •Defra
- Freight Quality Partnerships
- Fleet companies
- Bus companies
- •DCC fleet



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Multi-media message







Vulnerable road users training courses

- Engineers
- Technicians
- RSOs
- Accident Investigators
- Police Officers





- Intervention for violating riders
- Rider Risk Reduction course
- Dr Cris Burgess



Rider Risk Reduction scheme - Introduction



- Motorcyclists over-represented in KSI statistics (Hewson, 2002; DfT)
 - 1-2% of road traffic (by miles covered)
 - 25-35% of KSI collisions involve motorcycles
- Target group
 - Riders of 'large capacity' machines
 - Men, 30-45 yrs
- Development
 - Empirical evidence
 - Police, fire and rescue, paramedic (inc. Air Ambulance Trust)



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Rider Risk Reduction scheme - Operation

- Devon County Council
 - Initiative and financial support
- Devon & Cornwall Police
 - 'Operation Rider'
- Referral criteria
 - Police diversion
 - Motorcycle 500cc+ capacity
 - Fixed penalty ticket
 - Rider would benefit from 'attitude reorientation'



Rider Risk Reduction scheme – Objectives



• Aim

- prevent further unnecessary deaths of motorcyclists on Devon's roads
- Objectives
 - <u>NOT</u> to stop clients from riding
 - to give clients a sense of their own vulnerability (again?)
 - to help clients understand their human limitations
 - to provide clients with enough information for them to make realistic assessments of risks involved in riding bikes, each time they go out



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Rider Risk Reduction scheme - Approach



- Novice drivers and riders need basic skills
- Experienced drivers and riders <u>may</u> need new skills
 - Skills must be applied appropriately
 - Increasing skills increases sense of control over driving environment
 - Increasing sense of control increases confidence
 - Increasing confidence increases likelihood of 'risky' behaviour
- Traditional advanced rider training is potentially beneficial
 - <u>But</u>, need to talk to the head before we train the body



Rider Risk Reduction scheme - Approach

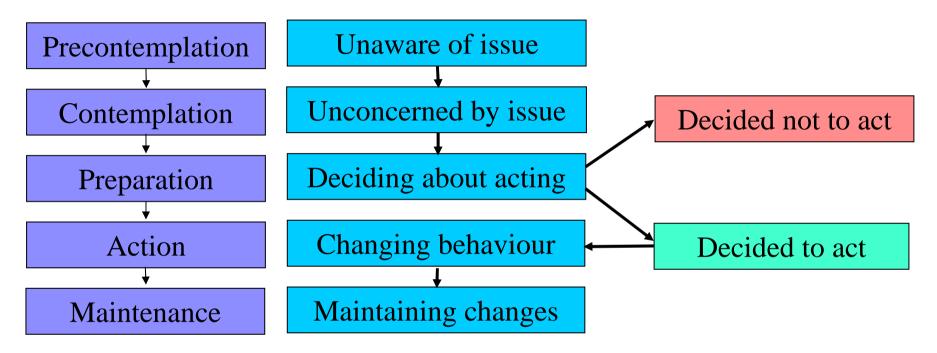


- What do we know about behavioural change ?
- Riding bikes can be an addictive behaviour
 - mood modification, tolerance, withdrawal
 - compare with joyriding (Kellett & Gross, 2005)
- What can Health Psychology tell us ?
 - Transtheoretical stage model of behaviour change
 - Cognitive-Behavioural methods: 'Think feel behave'



Stage model of behavioural change





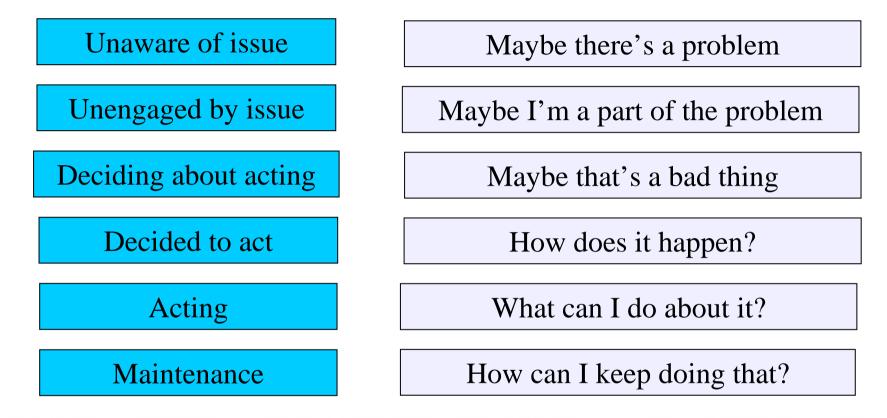


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(Prochaska & DiClemente, 1982)

Stage model of behavioural change







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Rider Risk Reduction scheme - Evaluation



- Self-report feedback
 - "I was expecting lots of pictures of what happens when it goes wrong. Instead it highlighted what goes wrong and why."
 - "This has given me greater understanding of my limitations and how to stay well within them whilst keeping something in reserve for the unexpected. It's as much fun if not more fun too."
 - "I believe it may have saved my life."
- Readiness to Change Questionnaire (RCQ; Burgess, in press)
 - Evaluation methodologies should be based on same model as intervention itself



Rider Risk Reduction scheme - Dissemination

- National Rider Improvement Scheme working party
 - Lancashire County Council 'RiDE' scheme
- Driver Behaviour & Training Conference Edinburgh 2005
 - Kirklees Metropolitan Council/ DSA Motorcyclist 'Pass Plus'
 - West Berkshire Council/Thames Valley Police offender retraining
- International Congress in Applied Psychology Athens 2006



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- Improving road conditions for motorcyclists
- Materials Laboratory
- Keith Grant



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SMA - Current Problems



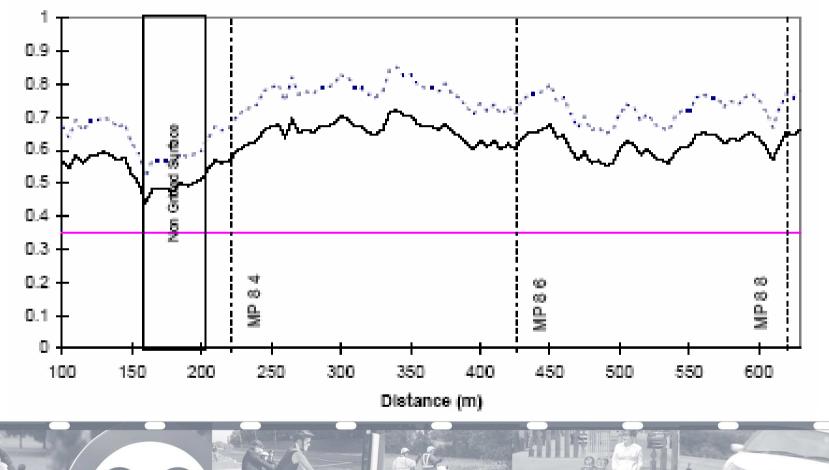
- Reports of accidents on newly laid SMA
- Problems reported by:
 - Police
 - Motorcyclists
 - Motorists
 - Horse riders
- Difficulty/controversy in resolving relevance of "wet skid" & "dry skid"



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Customer Feedback



 ".... crossroads on her shod horse and also reported it as being grippy with no slip at all. has a horrible camber as you travel north over crossroads so knowing it is grippy despite it sloping away is very reassuring"



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Measuring Pedestrian/Vehicle Slip/Skid Potential







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ePSV – understanding how aggregates perform in the "real world"



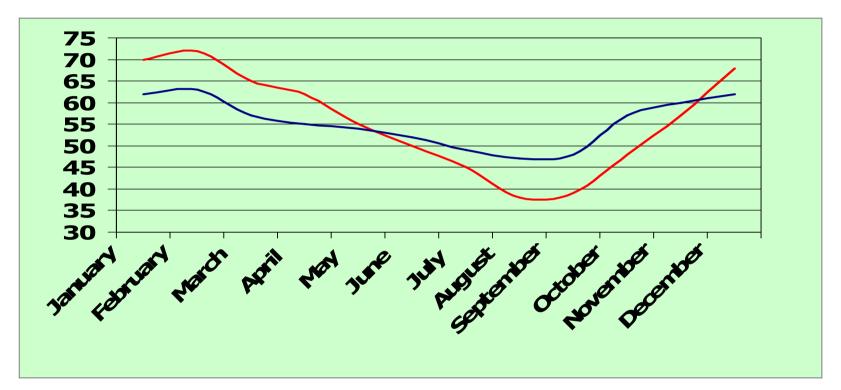
Quarry	Aggregate type	PSV	EPSV
Bardon - Venn Hanson - Barton Wood Bardon – Blackhill	Gritstone	65 & 60	60 to 64
Bardon - Hillhead Hanson - Redball	Quartzite	53	55 to 59
Bardon - Greystone	Basalt	57	50 to 54
Hanson - Trusham Wainwrights - Moonshill	Basalt	54 & 54	45 to 49
Hanson - Hingston Down	Granite	54	45 to 49



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Effective PSV – safe roads are a yearround requirement







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Audit & Review

• Publicity

Bikers can help shape the way training is given



Death crash mum backs safety push

Courses set to aid Devon bikers' safety

Killer spills campaign

A NEW campaign has been launched to highlight the dangers faced by motorcyclists from diesel spills on Devon's roads. Organised by Devon County Council's road safety team, the initiative, called Spiller Killer, aims to raise awareness of the problem and the potential dangers to road users, as well as encouraging drivers to report diesel spills so that the local authority can take action. The initiative is part of the Bringing Bikers Out Of The Blindspot campaign.



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Audit & Review

Publicity





Audit & Review

Publicity

The Damcheses attended by the anothe London of Finance The initial ores attention from the launch of this ca was extremely positive. This included extensive coverage on 1 radio, most of this local papers in the radionally, through the local Authors Officers Association (LARSDA) website ŝ 5 bilding magazines including NOV and the Motorcycle Action Group. 0 Subsequently, further adverts ements compalign have been included in a nu 2 outlets. For example, an A4 spread in reagazine which is distributed to ever the County (with an approximate rea 0 220,000). Rider survey question naires every programme distributed at the D Motorcycle Show and posien and qu have been sent to local dealers blids (L) and illowies etc. Palgnton litte Night excellent varue to distribute this inic gather views and opiniom. An article compalign will appear in the rest odd DVF newsletter and again we are exp good firstback from their members.

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10humn 2003

in July 2003 Devon County Council's Road

Safety Team launched its Bringing Bikers Out

Of The Blind Spot campaign. The campaign is

Bringing bikers

A joint campaign by Deven County Council & Deven and Cornwall Police, supported by the Motorcycle Action Group and Deven Advanced Motorcyclists

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initially designed to run for a period of 3 years and riders allee during which time we intend to: spring 2004 **Bringing bikers** A joint campaign by Devon County Council & Devon and Cornwall Police, supported by the Motorcycle Action Group and Devon Advanced Motorcyclists The first stage of the Bringing Bikers Out of The Blind Spot campaign was to consult with local bikers to gauge views and opinions on issues the affect the safety of motorcyclists in the Count The response has been good. This edition of t newsletter shows the results of the consultati as well as the other work we are currently undertaking to improve rider safety. As part of the Blindspot campaign, we are look ensure that good quality, accessible and afford training is available to all motorcyclists who wa improve and develop their riding skills. (D) To meet this goal, we are making a Ride Development Course available across the Co recent Press Release and request in the last edit this newletter asked for volunteers to help asse

out of the blind spot

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Gather Intelligence from bikers as to their needs concerns and aspirations as users of Devon's

Raise the profile of biker safety amongst drivers

course. The response was extremely good and v were oversubscribed by 100%. Eight pilot courses were run and those attendin were asked to provide critical feedback. These comments have been used to make alterations course to ensure the structure and the training provided suits the needs of riders. By providing sound advice and training we can help reduce motorcycle collisions in the County.

The Rider Development Course will soon be avfrom the Development Course will soon be ava As more instructors are identified and trained w be able to offer more courses, at more location around the County. This course will be suitable for motorcyclists wh

Upgrading to a larger bike Returning to motorcycling after a break Or just looking to improve their riding skills The course has been designed to be flexible to t needs and requirements of individual riders. Ba on the initial feedback that a rider provides, the trainers will tailor the course around each rider

needs and aspirations. has been designed to keep you inform rogress we are making in improving safety for bikers.

Our target: to reduce deaths and injuris

out of the blind spot summer 2005 **Bringing bikers**

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out of the blind spot

A joint campaign by Devon County Council & Devon and Cornwall Police, supported by the Motorcycle Action Group and Devon Advanced Motorcyclists

Slipperv Subject - Devon County Council's Materials Laboratory Improving Manhole Cover Safety

Representatives from Devon County Council's Materials Laboratory are playing a major role in working towards introducing changes to the legislation for manhole covers in the highway. As well as having an officer on the European Steering Group for this issue, Devon County Council has become involved in a major consultation to ensure improved safety in this matter.

The European Standard for manholes, EN124, has been commented on by all of the EU member states and perhaps not surprisingly there has been a mixed response to the UK's proposal for covers to have a declared skid/slip resistance value based on their "in use" condition.

The UK's proposals were holstered by comments from motorcycle interest groups and Highway Authorities across the UK, following Devon lobbying them with its suggestions for an improvement in the standard. Devon County Council would like to thank all those who responded to our call for comment and who onsequently contributed to the standard being adopted in the UK.

There have been counter proposals to exclude certain cover material types from this test requirement as well as suggestions that a test on the asmanufactured cover would suffice. The UK committee is unanimous in resisting any proposals that would reduce the in-service safety of covers. Even the UK manufacturers on the committee are giving their full support to this position. In effect the UK will yeto any attempts to dilute the standard to the detriment of public safety.

One of the largest manufacturers of iron covers has produced a prototype of what they hope will provide

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high levels of skid / slip resistance. A number of these have been installed in Devon so that we can measure how well they perform under heavy trafficking.

.....

Devon County Council have also been assisting other UK manufacturers to develop non skid / non slip designs and materials for a range of end uses from nedestrian areas through to roads. It is hoped that UK manufacturers will be in a good position to meet the safety standards that should become a mandatory requirement across Europe in the near future.

As well as the work that is concerning the changes in the European Standard, work has also been undertaken to ascertain the effectiveness of the various retrofit materials that are currently available on the market (these are normally resin based products applied to iron covers and dressed with aggregate to improve resistance of the surface). To date, the trials to retrofit a skid/slip resistance of die surrace), to date, the that is to wholly successful as problems of adhesion are proving to be difficult to overcome. Whilst these materials on footway covers, which are only used by pedestrians, generally maintain their cohesion, tests on coated covers in the road, where wear and tear is far greater. have encountered problems. Thirty one of the utility companies who operate in

Devon have been asked for their proposals to deal with any of their covers that are identified as slippery. To date we have had twelve responses. When all the responses are in we will look for consistent action from the utility companies. It may also be of interest to know that around 95% of iron covers in the carriageway are owned and maintained by these companies

If you have any queries regarding ironmongery in the carriageway, please email questions to bikers@devon.gov.uk



Summary of outputs and outcomes



- Research of crash data
 - Copies have been requested by from numerous LAs
- Research of user opinion
- Development of training courses
- Multi-media biker safety promotions
- Improved road conditions
- Sympathetic road layouts
- VRU standard feature in driver training



Summary of outputs and outcomes



- Ongoing feedback & data collection
- Long term support & involvement from partners
- This work has been highlighted good practice by the IHIE in their latest guidelines
- 100 riders passed through the RRR course with excellent results in their anon. feedback
- TRL Benchmarking Group has allowed us share our initatives



Summary of outputs and outcomes



• 30% drop in biker KSIs between 2002 to 2004



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