OPERATION BIKESAFE 2000+
AN INITIATIVE TO INCREASE MOTORCYCLE SAFETY

LANCASHIRE CONSTABULARY, LANCASTER POLICE STATION, ROAD POLICING UNIT, ENGLAND, 2002

SUMMARY:
The Lune valley is a picturesque rural beauty spot located in the Lancaster geographic policing area, and has become a nationally recognised haunt to sports bike riders. It's popularity is due to the topography and roads, which are strikingly similar to the Isle Of Man TT road race circuit, accounting for the large number who ride dangerously, with little regard for other road users, local community and speed limits. A traffic survey showed that in 2001, 4000 bikes visited the area every weekend and over 28,000 annually. Between 1995 and 1997, fatal and serious injury rider casualties rose significantly by 68% from 48 to 71. This was mirrored by 38 complaints from the local community regarding the anti-social riding manner and excessive noise.

During 1996 / 7 a major ‘zero tolerance’ enforcement campaign was launched. This had no impact on casualties, complaints from public rose, as did complaints from the motorcyclists that they were being discriminated against. An in depth analysis took place, highlighting the high proportion of fatal and serious motorcycle collisions in the area, and registration of new motorcycles rising nationally by 42%. A large percentage bought by riders, between 29 and 45 years of age, who ride beyond their capabilities with disastrous consequences.

In April 1999, an initiative called BikeSafe 2000+ was devised, comprising a five-point plan: Awareness - Education - Partnerships - Training - Enforcement, to promote links with community safety, and addressing national and force casualty reduction objectives. It was independently projected that in 2001 motorcycle casualties in the area would increase by 31%, from 58 in 2000 to 74. The strategy saw casualties reduced significantly in 2001 for first time in 5 years with fatalities reduced by 100% to zero, set against five in 2000. Serious injuries were also reduced by 25% from 41 to 31. Overall riding standards improved leading to a 92% reduction in complaint letters from the local community.

It is known a fatal injury collision costs £1.4 million and a serious injury collision £141,000. If the reductions in casualties for 2001 are set against 2000 figures we have made a saving of £11.2 million. (5 fatal & 10 serious). The savings in human emotion terms are priceless.

In Lancashire, sales of new machines have quadrupled with a 284% rise from 970 to 4826, with over 61,000 motorcycles registered in the county, an increase of 14% over the previous years figure of 52,000. The figures are set against a backdrop of a national increase in 'super-bike' sales of some 150 throughout the UK. With this in mind, the 31 motorcycle fatal & serious injury collisions represents only 0.70% of the 28,000 bikes visiting the Lune valley each year.
In 1998 the number of motorcyclists visiting the Lune valley was increasing. Upwards of 4000 riders are visiting the area each weekend in comparison to less than half that number in the previous three years. This has a dramatic effect on the number of fatal and serious injury motorcycle collisions. Prior to 1998, there was little being done by way of a systematic approach to tackle the problem.

Motorcycle sales

I liaised with the Motorcycle Industry Association who stated motorcycle sales between 1994 and 2001 rose by 48% nationally. In 2000, 58% of the 121,908 new machines registered are sports bikes over 600cc (engine capacity).

In Lancashire sales have quadrupled with a 284% rise from 970 to 4826. Recent analysis has shown there are over 61,000 motorcycles registered in the county. In 2000 this figure was 52,000 showing an increase of 14%.

Number of visiting motorcycles

Traffic flow counts conducted in the area over two Sundays in May and August showed an average 340 motorcycles per hour in the busiest periods between 8.00am and 8.00pm. This indicates over 4000 bikers are visiting the area every weekend during the summer. The area is popular to bikers throughout the year with the busiest months being April to October. Based on current registration figures and traffic counts over 28,000 motorcycles visited the area in 2001, representing 46% of the 61,000 bikes registered in the county.

Health authority concerns

Our partners in the local health authority also saw an increase. I spoke to an accident & emergency consultant at Lancaster Infirmary who identified a rise in rider fatalities and serious injury casualties, especially from the Lune valley. Over 40% of seriously injured riders live outside the area, taking up intensive-care and ward bed-space at Lancaster Infirmary, aggravating waiting list times for local patients requiring operations. The average stay as bed patient in Lancaster Infirmary for an injured motorcyclist has increased from 18 days in 1998 to 25 days in 2000.

Further information highlighted that from 1994 to 2000, motorcycle casualty admissions were 31% higher than the average of all UK hospitals.

Public dissatisfaction

A further problem was public dissatisfaction. Between 1996 and 1998 there were 34 written complaints to the Police from residents in the Lune valley, who also regularly complained to the police at the local parish council meetings, over the high speeds, excessive noise and anti-social riding manner of motorcycles at weekends throughout the summer.

ANALYSIS

The analysis is broken down into three areas: Location, Victim, and Offender.

Location

The Lune Valley is a rural beauty spot, over approximately 80 square miles in North Lancashire, forming a gateway to the Lake District, Trough of Bowland, North Yorkshire National Park and Fylde coast. It is a nationally recognised haunt amongst sports bike riders, with twisting country roads presenting a challenge to upwards of 4000 riders every summer weekend, and is well publicised in
bikers specialist magazines. The topography and roads are strikingly similar to the Isle Of Man TT road race circuit accounting for the popularity, and number who ride dangerously at high speed, with little regard for other road users, and local community.

**Victim**

Victims could be the same as the offender. Their offending behaviour on the road made them a victim. There were also victims who were in the wrong place at the wrong time, for example, in June 1998 a 34 year old self-employed man, married with two children, was riding his 600cc Honda motorcycle, when he collided with a car emerging into his path from a side road. The rider snapped his spine, is permanently in a wheelchair, divorced from his wife, living in a flat on government benefits.

Residents in the Lune valley are also victims, whose lives are disrupted over the speed, excessive noise and anti-social riding manner of motorcycles at weekends throughout the summer. Letters of complaint:

- 1996/1997 15
- 1997/1998 19
- 1998/1999 14
- 1999/2000 05
- 2000/2001 01

Over the past three years five residents have become casualties in fatal and serious collisions involving motorcyclists riding at speed on the wrong side of the road.

**Offender**

To see tangible reductions in motorcycle casualties, we had to encompass the bikers needs, specifically addressing the deficiency in higher level riding skills, coupled with excess speed and inexperience, which led to crashes. I conducted detailed research into motorcycle collisions, creating a profile of riders most at risk:

- Male, aged 29 to 41 years.
- Previous motorcycle licence holder
- Rusty riding skills, developed in teens,
- Using 600cc + engine size, high performance motorbike.

It was important to utilise the profile in developing the training model. Further analysis identified the following precipitating factors in 60% of rider collisions:

- Rural roads
- Between 0800 - 1730pm on Sundays
- Loss of control at excess speed on left hand bends

It was equally important to understand the riders mindset, I spoke to a psychologist at Huddersfield University who has researched into perceptions, attitudes and behaviour of motorcyclists, his findings proved invaluable in setting the learning objectives:

- Speed fantasy: - wants adrenaline rush, and emulates motorcycle racetrack heroes
- Risk taking in middle age serves need for mastery and expression of individuality.
- Mastery needs frequently met by experimentation, involving testing limits and taking risks.
- Low regard for road safety - thrill factor playing `cat & mouse` with Police.
RESPONSE

Having identified the problem, I looked at opportunities for changing rider's attitudes, behaviour, and disregard for road safety issues. The response was directly geared to the analysis of the problem, and was encapsulated in Operation Bikesafe 2000+ focusing on a high-risk age group, in a high-risk area at a high-risk time, which determined key learning objectives:

- Changing rider attitudes towards road safety.
- Communicate benefit of improved riding skills.
- Decrease attractiveness of riding dangerously and disregard for road safety.
- Enhance rider safety awareness.
- Develop understanding of machine and rider limitations.
- Strengthen perceived linkages between rider safety and riding enjoy ability.

To deal with these issues, I devised the initiative within the framework of a five-point plan:

- Awareness
- Education
- Training
- Partnerships
- Enforcement

Awareness

Mobile Exhibition Unit

A local insurance consultant donated a caravan, which has become a permanent BikeSafe mobile exhibition unit. It is towed to sites in the Lune valley where bikers congregate throughout the summer. Manned by police motorcyclists ambulance paramedics and Institute of Advanced Motorists, (IAM) who speak to riders, raising awareness to improving personal riding standards, and encouraging bikers to undertake the Bikesafe rider training.

Advertising Trailer

In May 1999 I found a single axle trailer abandoned on a farm. With donations of 12,000 from nine local businesses I had a double-sided advertising trailer built conveying a road safety message to each side of the trailer. Deployed to target roads throughout the Lune valley providing a highly visible message to bikers to slow down. Local residents in the Lune Valley were encouraged to use the trailer to display in villages, allowing them to take a positive stance towards improving rider behaviour.

Partnership publicity material

In partnership with a local insurance broker and the parish councils, I devised a leaflet raising concerns of residents to motorcycle riders. 5000 were printed at no cost to the Police, and given to riders at the exhibition caravan, distributed to snack bars, garages, shops, casualty department at Lancaster Infirmary and ambulance paramedics.

Bumper Back stickers

I designed three stickers bearing a motorcycle road safety message, named the BikeSafe Bumper Back Campaign, designed for display on rear bumpers of vehicles. British Energy at Heysham Power Station donated 12000 to print 5000 on vinyl stickers. I also devised a 1 metre long version. These were displayed on local
ambulances, police vehicles and selected public sector organisations, such as local haulage and coach companies operating in the Lune valley.

Community involvement

As a pro-active response to the complaints, I approached the Lune valley parish councils for myself, or colleagues, to attend meetings to talk about the Bikesafe initiative, also to deal with concerns and expectations over local issues regarding excess speed and poor riding standards.

Education and Training

To address key objectives, make the training cost effective and accessible to riders I adapted a 4 module approach called the BikeSafe 'Rider Skills Workshops' these are provided free and given over 2 evenings to groups of up to 30 riders. Each period comprises three 40-minute presentations, with riders split into groups of ten, visiting each workstation in rotation.

Workstation 1

Addresses theory of safer riding techniques, based on police advanced motorcycle rider's manual, focusing on the highlighted precipitating factors in collisions amongst the high-risk rider group.

Workstation 2

First-aid training called 'Help Your Mates "presented in partnership with ambulance paramedics, specifically tailored to motorcycle injuries, to increase riders awareness of the risks, and severe trauma injuries sustained in collisions.

Workstation 3

This module helps riders develop a better understanding of machine and rider limitations, with both theory and practical presentations involving riders, on motorcycle maintenance, focusing on safety critical items such as brakes steering and tyres presented by qualified mechanics, who give their time freely.

Workstation 4

A highly valuable two-hour session where participating riders put theoretical input into practice with an observed rider assessment. A ride critique and participant feedback identifies areas for improvement and enables effective assessment of the training. Participants are presented a certificate on completion, linked to discounts on motorcycle servicing, insurance, and advanced rider training.

The workshops are advertised through local press, radio stations, local dealers and rider clubs, and the Bikesafe exhibition caravan.

Partnerships

Partnerships were formed with 18 separate organizations which helped support the initiative through donations of provisions; labor assistance; and enforcement assistance. These included other government agencies, private companies, and motorcycle organizations and associations.

Enforcement

To see tangible reductions in motorcycle casualties, decrease the attractiveness of riding dangerously, and disregard for road safety, we had to target motorcycle riders who fitted the offender profile in the analysis, and addressing the deficiency in higher level riding skills, coupled with excess speed and inexperience, which led to crashes.

High visibility motorcycle patrols were deployed to identified motorcycle collision, and speed complaint hotspots on rural roads in the Lune valley between 0800 - 1730pm on Sundays, specifically targeting high speed and dangerous riding standards of those who chose not to heed the 'user friendly' points of the initiative

A number of operations were initiated in the area, in partnership with the Driver & Vehicle Licensing Agency, specifically dealing with registration, licensing and rider documentation.
I devised a handout, which was given to every rider stopped at the roadside to and local residents, explaining the Bike safe strategy and the need for enforcement strategies.

In 1999, a local rider bequeathed 15000 in his will to the Bikesafe initiative. The legacy was used to purchase a plain police enforcement motorcycle, fitted with speed detection equipment and covert radio. This is also deployed to the target hotspots to monitor riding standards in the Line valley throughout the summer.

**ASSESSMENT**

It was predicted that by 2001 deaths and serious injuries would rise to 72 in the area. As a result of this initiative there were no deaths and 31 serious injuries. This is a cost saving of £11.2 million, albeit the savings in human emotion is priceless. Similarly, resident satisfaction has also risen. Further information as to the assessment is as follows:

**Casualties**

Motorcycle casualties for 2001 have been reduced significantly for first time in 5 years:

- Fatalities reduced by 100% to zero, set against five in 2000.
- Serious injuries also reduced by 25% from 41 to 31.
- 2001 compared with 1997: Fatal = 500 % decrease. Serious = 53 % decrease.

The NHS projected a rise in 2001 of 29% in fatal and serious injury rider casualties, from 58 in 2000 to 74. If the actual reductions are set against set against the projected rise we have achieved a decrease of 58%, to just 31 total casualties.

Further information indicates admissions for 2001 to the casualty department have reduced in parallel to the decrease in rider casualties. The average stay as a bed patient in Lancaster Infirmary for an injured rider has decreased from 25 days in 2000 to 17 days in 2001.

It is known a fatal injury collision costs £1.4 million and a serious injury collision £141,000. If the reductions in casualties for 2001 are set against figures for 2000, we have made a saving of £11.2 million, (5 fatal & 10 serious).

In Lancashire sales of new machines have quadrupled with a 284 % rise from 970 to 4826, with over 61,000 motorcycles registered in the county, an increase of 14% over the previous years figure of 52,000. Traffic counts show over 4000 bikers are visiting the area every weekend during the summer and over 28,000 annually.

With riders traveling to the Lune valley from areas throughout the North West the figure is more likely to be in the region of 30,000 for the year. The figures are set against a backdrop of a national increase in 'super-bike' sales of some 150 % throughout the UK. With this in mind, the 31 motorcycle fatal & serious injury collisions represents only 0.70% of the 28,000 bikes visiting the area every year.

To address increasing numbers of riders from Cumbria and Yorkshire involved in collisions in the Lune valley, I devised a partnership mutual aid loop patrol initiative with these forces. As sections of target roads passed over county boundaries, police riders from each force provided cross- border supplementary high visibility patrols. This proved successful in improving rider behaviour and saw a significant reduction in collisions involving riders from these regions.

Lancashire Constabularies Western division covers the Wyre and Fylde coast. I identified 40 % of our rider casualties came from this area. This division assisted with high visibility patrols and enforcement, which saw a reduction in the collisions involving riders from the Fylde for the first time in 6 years.
Education and Training

Bikesafe rider skill workshops:

- 346 people applied for information and 322 applied to undertake the workshops.
- 310 motorcyclists have completed the workshop and rider assessments.
- 22 are pending a rider assessment, with 20 having failed to attend one or both lectures.
- 48 riders throughout the North West are currently on a waiting list to attend.
- Observed ride modules took 1 hour, taking up 150 hours, (2 riders per assessment).
- There have been 14 sets of lectures taking up 50 hours, including preparation time.
- 96 of the 310 riders who completed the workshops fit the profile in the analysis.
- 6 riders have attended the skills workshops twice.

A quality assurance questionnaire was sent out to 300 riders, 135 were completed, feedback was very positive with the following results:

- 93% stated the workshops increased awareness to their own safety and that of other road users.
- 107 had attended skills workshops, remaining 28 had visited the exhibition caravan.
- 25 had since taken further formal rider training, with 58 still considering.
- Only 1 rider has experienced a minor collision since undertaking the workshops.
- Only 1 participant was prosecuted for an excess speed offence in Lancashire.

- 24 letters of appreciation have been received from participants.
- 107 highly rated the value of the workshops in improving personal riding standards.
- Only 1 of 107 responses indicated they would not recommend the workshops to others.

Assessment rides took 1 hour. This totals 105 hours (or 13 eight hour shifts). There have been 14 sets of lectures taking up 50 hours, including preparation time. All officers time has been paid for through partnerships donations at no cost to the force.

Difficulties were encountered coordinating both theoretical input and practical training. Potential pitfalls and legal issues were discussed with legal advisors, providing the following solutions:

- Registration forms and training records for each participant.
- Rider assessment records providing audit trail for analysis.
- Assessors training and riding critique guidelines.

Further difficulties were encountered encouraging 'high risk riders' to attend workshops and identifying rider experience levels. In April 2000 a questionnaire was devised and sent out to all riders involved in motorcycle collisions in Lancashire. To date there has been a 76% return, from which we have 28 riders who fit the profile waiting to attend the workshops. It has also provided a valuable insight into assessing rider experience levels.

The Northern division model has received national recognition by the motorcycle industry and been used as a template by other police forces throughout North West and the Isle Of Man Constabulary.
In 1999, the HMIC inspected BikeSafe, and said in his report, "This initiative is worthy of highlighting as good practice and I am impressed with the energy, commitment and innovation of those involved."

Such has been the success, that in June 2000 it was selected to appear in a national catalogue of best practice casualty reduction initiatives compiled by the motorcycle industry, and used as a template throughout the region for BikeSafe North West, launched in March 2001.

**Awareness**

The exhibition caravan, has been visited by over 43,000 bikers at 30 different venues throughout the area. 76 visiting riders made training enquiries with 26 going on to undertake the workshops.

The advertising Trailer has seen continual use on target roads in the Lune valley. Local residents have used the trailer in the villages, with two residents displaying the trailer in their front gardens.

All 5000 publicity leaflets distributed, which received good media coverage in the local press. 23 rider training enquiries were generated from the leaflets.

5000 bumper back stickers were given out and displayed on buses and lorries traveling around the Lune Valley. This awareness strategy received excellent local media coverage with 13 enquiries Rider skill workshop enquiries from motorcyclists who saw stickers displayed on vehicles.

Quality of life for Lune Valley community greatly improved, due to significant improvement in rider behaviour through the area, and significant reduction in rider casualties. By replacing resident's fears with reality, letters of complaint reduced for first time in 3 years with 14 complaint letters in 1998 reduced by 92% to just 1 in 2001. In 2000 we received two letters from previous complainants who commented favourably on Bikesafe and the improvement to overall riding standards in the area.

**Enforcement**

Since April 2000, high visibility patrol and selective targeting of riders who fitted the offender profile in the analysis, has impacted directly on the significant reduction in casualties and an overall improvement in riding standards in the area.

2 high profile operations run in partnership with the Driver & Vehicle Licensing Agency, dealing with registration, licensing and rider documentation achieved the following results: 4 untaxed motorcycles clamped. With the exception of one impounded for non-payment, all vehicles were released back to their owners on payment of a £200 fee and a valid tax disc, this means that individuals have to record the fact that they are the current keepers which leads to greater accuracy of the vehicle record. The impounded bike was crushed by the DVLA.2 riders attempted to avoid the check site and were arrested, wanted on warrant for motoring offences,

The plain police enforcement motorcycle was deployed to target roads to monitor riding standards throughout the summer with the following results:

- 34 riders prosecuted for excess speed offences, (between 86 and 98 mph)
- 11 riders disqualified for excess speed offences (between 102 and 110 mph)
- 5 riders prosecuted for riding without due care and attention
- 3 riders prosecuted for dangerous riding.

**Summary of enforcement activity**

- 226 hours high visibility patrol and enforcement activity on target roads.
- 204 motorcyclists stopped and given copy of rider safety handout.
- 184 prosecuted for excess speed, dangerous or careless riding.
- 87 prosecuted for a riding offence on a 600 cc + sports bike.
- 42 prosecuted for using an illegal racing exhaust silencer.
- 21 prosecuted for illegal or illegible number plates.
- 42 reported for no tax.
- 13 prosecuted for no insurance or driving licence.
- 2 riders arrested for serious motoring offences in connection with use of a motorcycle.
- 198 of the 351 riders prosecuted for an offence fit the profile in the analysis.

FOR MORE INFORMATION

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