

WEST OF ENGLAND ROAD SAFETY PARTNERSHIP

TUESDAY 25TH MARCH 2008

ITEM 9 - EVALUATION OF SAFECAM OPERATIONS AND OTHER ROAD SAFETY WORK, PHASE 2 REPORT



REPORT by

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West of England Road Safety Partnership: Phase 2 Report

1. Objectives and Methodology

The West of England Road Safety Partnership (WoERSP) commissioned a review of the effectiveness of their safety camera work within the context of the wider road safety strategy. Phase 1 of this work (reported in December 2007) was an information gathering and scoping study designed to inform the research and tasks required for developing the strategic recommendations in Phase 2.

The headline findings from the Phase 1 report were that although there has been a reduction in casualties in the WoERSP area, there is insufficient progress towards matching the target of regional and national trends for persons killed or seriously injured in road traffic accidents.

Thus the objective of the Phase 2 work was to develop an evidence based work plan starting straight away and lasting through to the end of the casualty target period (c 2010).

This report is the result of the work to meet these objectives and has involved four main strands of work:

- Iterative discussions with Members of the WoERSP, road safety staff and stakeholders
- Partnership networking and planning workshop held on 30th January 2008
- Qualitative research including literature reviews, interviews and survey of moped riders.
- Quantitative analysis as summarised in the table below.

Table 1: Summary of casualty analyses

	Location	Residence	Age	Time of day	Season	Area wide	Bristol
Car occupants by driver and passenger	X	X	X	X		X	
Adult pedestrians	X	X	X	X			X
Adult pedal cyclists	X	X	X	X			X
Motorcyclists engine size and ownership	X	X	X			X	
Child pedestrians	X	X	X	X	X	X	
Safecam analyses	X						

A fuller and more detailed report, giving maps, analysis, a full literature review, interviews and market research results is available as a WOERSP resource.

2. Results

The road safety teams from the West of England Road Safety Partnership have identified four main groups of casualties where extra resource and effort is required to bring about reductions in line with national targets. These groups are: riders of motorised two wheeled vehicles, child pedestrians, adult pedestrians in Bristol and adult pedal cycles in Bristol.

The largest casualty group of two wheeled riders are 16 and 17 year old moped riders especially in deprived areas. This can be seen in Figure 1, page 5 below where the areas shaded red are the most deprived and those shaded blue the least. The dots represent approximate locations of where these young injured moped riders live. The survey and interviews with this group and those involved in programmes targeting this group show a wide range of opportunities to reduce casualties involving targeted work with partnership working across engineering, enforcement and ETP and the voluntary sector.

For child pedestrians there is an even stronger link between deprivation and casualties. The majority of the casualties take place during lighter evenings and during school holidays.

Both pedestrian and pedal cycle casualties in Bristol are concentrated along the main radial and orbital routes. Figure 2, page 6 below, shows this relationship for the location of injured adult pedal cyclists in Bristol. As for where these people live, there appears to be a link with student accommodation and to areas of higher deprivation for both adults and child pedestrians. The accident records collected by the police include a range of factors which the police deem to be contributing to the accident. An analysis of these factors for the WoERSP area indicates that pedestrians who have been drinking are injured predominantly on Saturday and Sunday and of all 22-25 year old pedestrian casualties one quarter had been drinking. Young drivers aged 18-21 were responsible for injuring one quarter of the pedestrians who had been drinking. This indicates an evening and weekend problem in Bristol.

In relation to Safecam, the analysis of camera site performance shows that parts of the programme have been underperforming as not all cameras are working equally well in reducing speeds and casualties. Aspects of operation and signage that could be improved have been identified.

Effective partnership working is often absent from the WoERSP initiatives with different departments and organisations working independently. Yet presentations at the Partnership workshop held in January clearly showed that many individual targets such as crime, fires, health as well as road safety could be best addressed by targeting the same geographical areas. Attendees at the workshop included engineering and road safety staff from all four Councils, the police, fire brigade, Government Office of the SW, West of England Partnership, Highways Agency, Observatory of the SW, the Youth Offending Team and Voluntary Sector interests including the Wheels Project. The Courts, Driving Standards Agency, NHS, local colleges and the University

of the West of England also expressed interest in future involvement. The outcome was a commitment to more effective working including the specific actions show below.

- Work together to Improve data collection and analysis in relation to road safety. To facilitate this, the West of England Partnership (who already collect a lot of demographic data) offered to add road safety and other relevant information to their base.
- Set up two immediate Partnership projects to target young moped riders and young drivers in deprived areas.

Evaluation, especially of behavioural change, has hitherto been a weak point within the Partnership's activities and strategic decision making. This applies not just to Council based ETP work but also to externally funded initiatives such as such as Speed Choice and voluntary funded initiatives.

3. Recommendations

3.1 Targeting

It is very clear that in order to improve road safety targets, there is an urgent need for the WoERSP to adopt a more targeted approach with particular emphasis on the deprived residential areas where casualties are more likely to live. The corollary of this is that some of the existing activities will need to be downsized or even (depending on the results of evaluation) discontinued.

A holistic approach to understanding lifestyles of different groups is important in getting specific road safety messages internalised. An example of this is the young moped rider programmes undertaken by local organisations such as Wheels or the Young Offenders Programme whereby the best results are obtained when road safety messages are integrated with basic skills and career guidance. Similarly outreach work with young drivers or riders needs to take into account the underlying economic reasons for behaviour such as unlicensed driving or poor vehicle condition.

To facilitate targeting, there is a need to use a wider range of data, information and analysis techniques and to provide some of this data as well as share the results within the Partnership. The West of England Partnership have agreed to add road safety and other relevant data to their existing data base and the effective use of this and other data bases will require new protocols and some training within the Partnership.

3.2 Evaluation

The key to targeting is evaluation. New emerging techniques need to be incorporated in future planning and used to evaluate all existing programmes including Speed Choice and voluntary initiatives. National sources of information on evaluation and shared knowledge from other road safety

experience such as DfT research and the Time Bank library of resource will be essential inputs to this process.

Similarly, if the Safecam programme is to be effective, there is a strong case for reassessing the links between placement, enforcement levels and timings especially for the 'legacy' or pre 2002 sites.

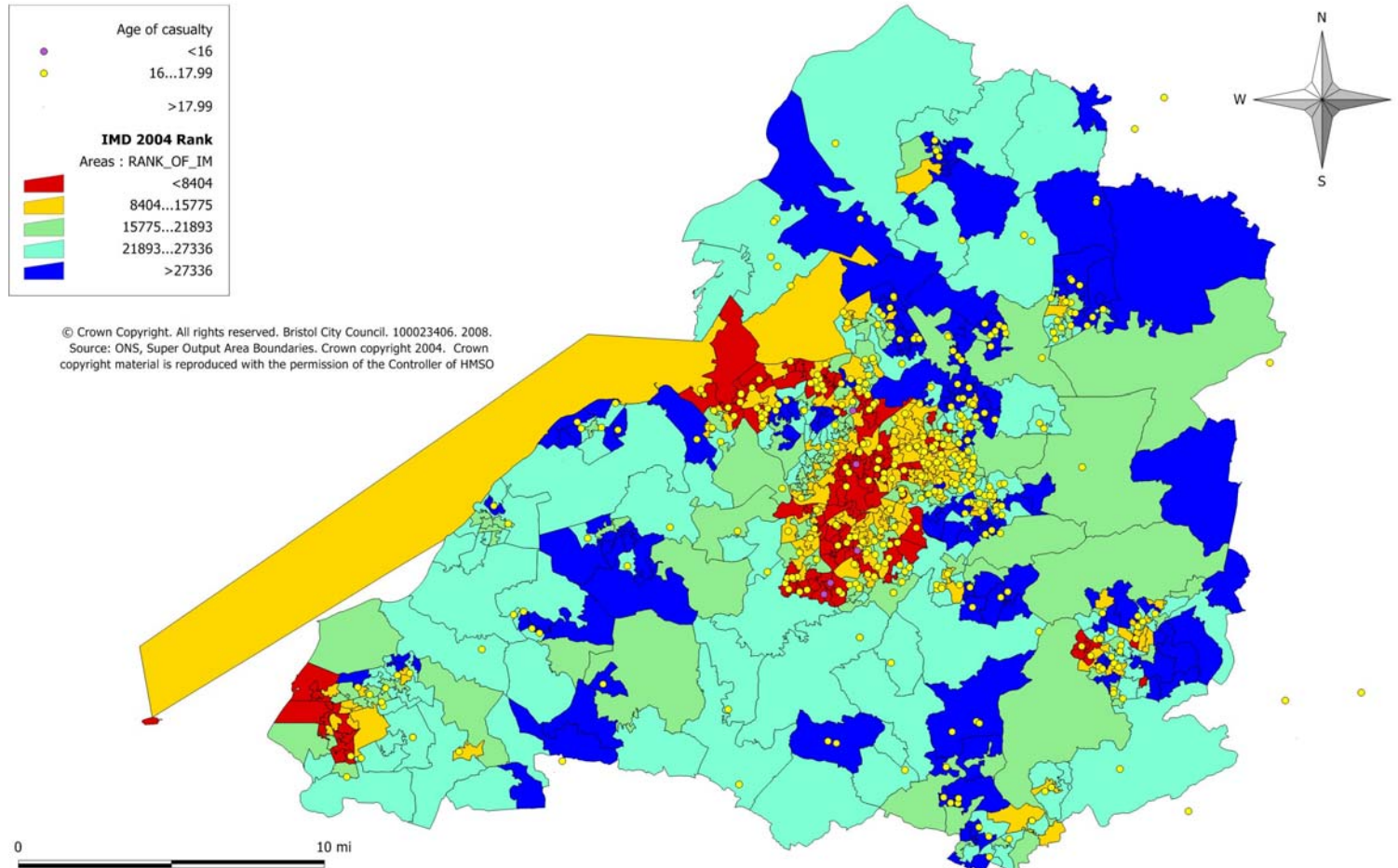
3.3 Partnership

There is evidence from the research that a key requirement for the future of the Partnership is cross organisational and cross disciplinary working in order to gain a wider understanding of the problems. This in turn will enable the development of strategic and targeted programmes.

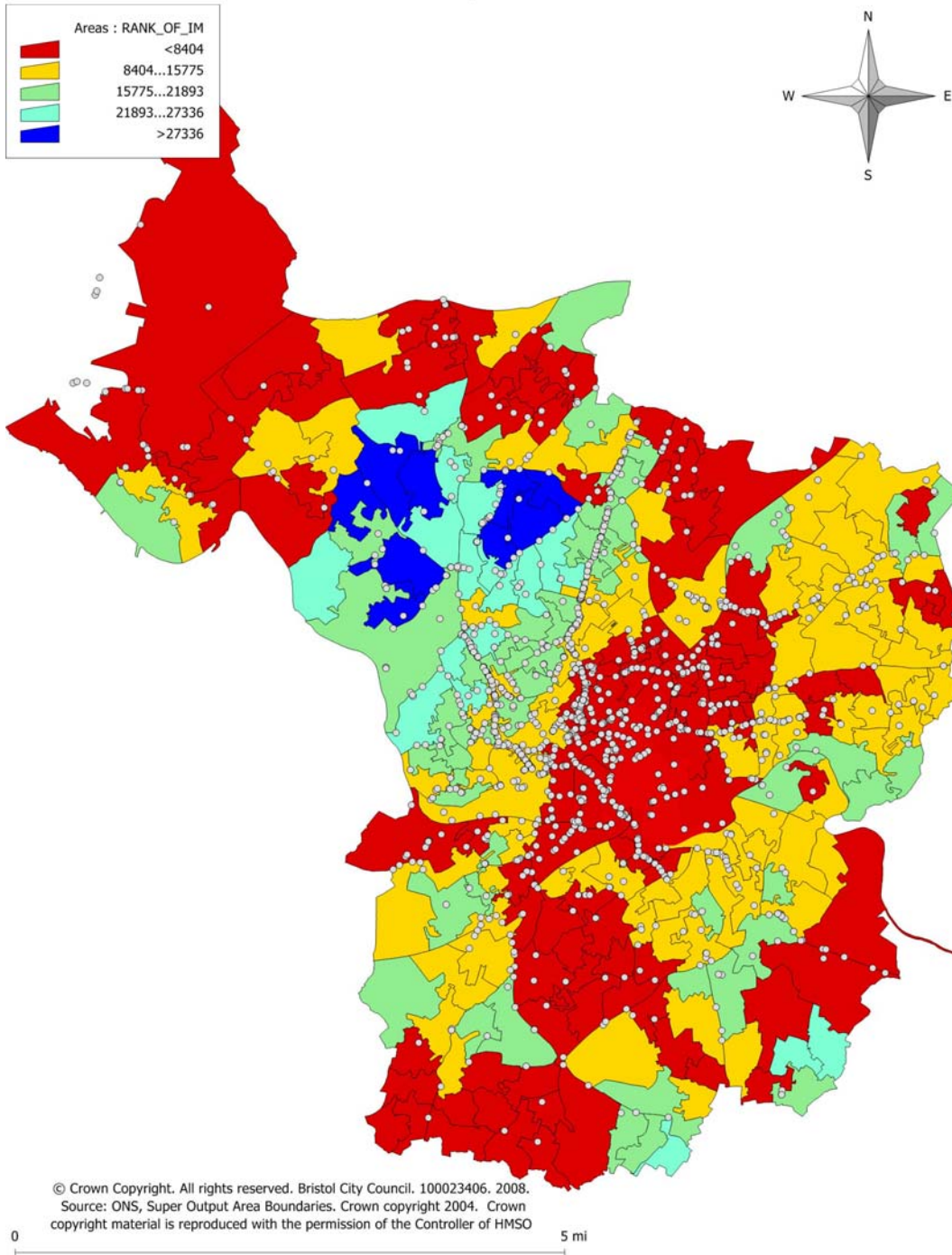
A good example of such a need is demonstrated by research which shows that some of the front line officers who are currently delivering road safety messages to, for example, young people, are not the most appropriate for maximising the opportunity. Thus the uniformed services are often more effective in influencing behavioural change to certain groups such as vulnerable young men. On the other hand the emergency services are not necessarily the best people to design the message itself. Yet again this demonstrates the need for partnership working.

The results of the Partnership workshop held during the Phase 2 research shows that there is a good prospect for closer working in the future and the initiatives identified should be started as soon as possible to avoid losing the momentum. In addition those who were unable to attend (for example, the Courts, the DSA, the Primary Care Trusts) as well as others who could be relevant to particular initiatives (for example, VOSA, regeneration programmes, voluntary sector groups) should be actively recruited to join in.

1998-2006. Moped rider casualties, 17 and under.
Approximate location of residence.



1998-2006 Pedal cycle casualties 18 and over. Casualty Location



4. Workplan for 2008-2010

4.1 Safecam

Work has already started amongst the authorities in the Partnership to design a programme to investigate each camera site for effectiveness with the least effective and oldest sites tackled first. This is involving analysis of speeds, penalties, camera type and operating times as research indicates that enforcement at random times of the day and at sites at random is highly effective in bringing about a reduction in speeds across an area. Where there is shown to be low impact on speeds and/or casualties, site visits need to take place with engineering, enforcement and ETP teams for joint investigation and action which may include in some cases removal or resiting. With 86% of main roads in rural areas in the South West and where a third of deaths occur especially in this summer months, this is a crucial action.

4.2 Engineering

Route safety strategies

There is a need to adopt a route road safety strategy for main radial and trunk routes where there is a high level of casualties especially involving young drivers and cyclists. A successful strategy will require co-ordination between authorities as these routes cross local authority boundaries. The example of pedal cycle casualties in Figure 2 shows this. A combination of camera, enforcement, engineering and ETP measures will be required although not all will be introduced simultaneously. It will also be possible to find quick wins such as enforcement, signing and ETP work with the highest risk groups in immediate residential areas, at workplaces and other journey destinations.

Area based strategies

Investigate opportunities for introducing zonal or area wide speed reduction to link with regeneration projects.

4.3 ETP work

Build on the data analysis developed for this research to identify priority target groups for casualty reduction.

Refer to the latest research results on evaluation to design the programmes and build in evaluation from inception.

Design ETP programmes for target groups including the two agreed at the WoERSP Partnership workshop (namely, young male moped riders and young drivers in deprived areas). It is gratifying that this work has already started with detailed mapping of clusters of residential addresses and location of moped casualties.

Explore opportunities for leverage of additional funding to expand and support voluntary projects working with the target groups. These will not be confined to road safety issues but need to include broader life skills work. Examples of

possibilities include the 'Every Child Matters' initiative, regeneration programmes, Train to Gain, and cycling training funds.

As the emphasis switches to targeted initiatives there will also be a need to develop alternative strategies for less casualty prone groups (e.g. schools in affluent areas or boys rather than girls). This is not to say that these groups will be neglected but that there needs to be an emphasis on cost effective methods including use of proven external sources such as national campaigns or successful materials developed by other organisations. Libraries of resources held by external groups such as the Time Bank, Department for Transport and Brake will be especially useful and cost effective for this purpose.

4.5 Process

Data Analysis and Management

Improved data analysis and presentation needs to be made available to all in the Partnership in order to facilitate targeted working, monitoring and evaluation. The techniques available to achieve improved analysis have been demonstrated to the WoERSP during the research. The West of England Partnership has offered to facilitate this by adding road safety data to their existing data base. To make best use of such data, a data champion within the WoERSP will be required to liaise between Government Office and the wider WoERSP staff. The champion need not be a full time appointment but will need to be proactive in disseminating the implications of data analysis and requests for data throughout the WoERSP in a user friendly manner.

Closer Partnership Working

One of the outputs from in the Partnership workshop day was to ensure the different organisations in the WoERSP work together more strategically and with greater co-ordination. As well as those who attend regularly steps need to be taken to involve a wider range of organisations with emphasis on sub groups working on specific projects. Examples of organisations currently less involved include the courts, Local Authority Health and Safety departments, employers, trade unions, the health service and the voluntary sector – including age, youth and disability groups. To facilitate this, a WoERSP co-ordinator should be appointed with the initial remit to kick start the tasks outlined by the Partnership workshop.

5. CONCLUSION

During this research, the WoERSP has built up a growing body of knowledge and understanding in relation to the potential for finer targeting together with the need for more emphasis on evaluation. In addition opportunities for wider partnership working have been developed. The WoERSP is now in a position to move forward to develop the strategy and progress towards achieving their targets.