



Is innovation the answer for Road Safety?



PROCEED with CAUTION:

Is innovation the answer for Road Safety?

INTRODUCTION

In June 2010 the [Department of Communities and Local Government](#)¹ announced that amongst the £6.2 billion of government spending cuts to be implemented immediately, there would be a 27% reduction in the annual road safety revenue grant (£20.6 million taken from an anticipated £76.7 million) and a 100% reduction in the capital grant (£17.2 million) made to local authorities. Overall this equalled a 40% reduction in the combined road safety grant. In the majority of cases these cuts are being passed in their entirety on to road safety teams and road safety partnerships who are now looking for creative solutions to manage the shortfall and provide security for vital road safety functions for the future. It is becoming clear that in future there will no longer be specific grants for road safety with much greater emphasis on 'localism'. If there is no local support for certain road safety activities, then it appears difficult to see how they will continue in the future.

In response to a request from RoadSafe, this thought brief takes a look at some of the ways in which technology and innovation could answer the pressing needs of the road safety community to continue delivering the world's safest roads under very different economic and political conditions.

SUPPORTING 'LOCALISM'

Localism needs to be more than rhetoric; it needs a strategy, otherwise it will drive the costs of service delivery sky high at the very time we can ill afford it. What the commercial sector knows well and demonstrates brilliantly is how to deliver services that are sympathetic to the local community of users, but backed by the strategies and structures that make it affordable. Localism in road safety, devoid of this strategy, policy and delivery framework would be like taking the retail sector back 70 years: blissfully local but devoid of the tools that make it anything other than inadequate, ineffectual and inefficient in the modern world.

It is possible to deliver local solutions that are effective in terms of both impact and cost and there are ways to utilise commercial sector knowledge and involvement to do so, but it does require a commitment from government to ensure that the multitude of road safety bodies can lean on a central framework of knowledge, planning and resources.

Take road safety publicity work, whilst the figure has undoubtedly reduced given recent cuts imposed by Government, national expenditure has been running at around £40m per annum. Pass that kind of budget to any marketing director in a major commercial sector company and they would want to implement integrated campaign work that ran through all channels (above the line, online, PR, press advertising etc.) and could ultimately be measured in its delivery to the customer. Road Safety engages hundreds of agencies from all 3 sectors who are at times competing with each other for the same space and at its worst communicating conflicting messages. This inefficiency of investment of public funds could be seriously augmented through unstructured localism.

¹ <http://www.communities.gov.uk/documents/localgovernment/pdf/1611330.pdf>

More positively, the power of localism and the 'big society' can be harnessed by the road safety profession particularly to support areas such as speed management. Community Speedwatch² is an excellent example of this, supporting local communities to engage in protecting their own residents and road users by relatively low cost centrally administered solutions that are delivered at the frontline by volunteers in the community.

EVOLVING STRUCTURES AND THE JOURNEY AHEAD

There are areas where Road Safety is making excellent progress; sharing knowledge³, data analysis⁴ and driver education programmes are among these, however, policy makers need to be careful not to overestimate the ability of technology to deliver reliable, scalable solutions in the immediate term – the best solutions require testing, development & evaluation to take to market in a successful way. For example there are already some cases where driver offender re-education is being delivered using online content⁵ and academic assessment shows strong support for these programmes, but for reliable national schemes to be built on this basis there is a need to accurately assess the relative benefit that each scheme is producing; there would be little point in investing heavily in an unproven methodology.

Undoubtedly there are enormous savings to be made through consolidation of some key services. If the enforcement administration process could be redesigned, overcoming any necessary legal restrictions, the savings would most likely run into hundreds of thousands. A unified national fixed penalty processing centre, or at least large regional units, which handled high volumes of speed offences each year would almost certainly provide far greater efficiency and value for money than the current structure; over 30 smaller units with variable systems and processes. The same could be true of instigating a national courts payments service rather than the current plethora of local units with variable costs and work flows.

Even simple things such as technology platforms for public information could be sensibly rationalised saving significant costs. Road Safety information resides on a multitude of websites, whereas a national resource would arguably be far more efficient. Even if local sites are retained, standardised online tools for collision mapping or presenting enforcement locations could be developed in such a way that they are deliverable incredibly cost effectively rather than expensive development being commissioned in many different local areas.

Data management is also an area where a considered approach to joined-up working could result in enormous savings. One recent development from Thames Valley is an enforcement reporting tool that could be scaled up to offer exceptional value on a national level. The database is structured to take data input on enforcement activity from the camera technician through a web browser, engineers & service providers can update site information where maintenance work is needed or has been undertaken, casualty data can imported directly from a related GIS database. The effect of commoditising these inputs is that without the need to pay an army of local analysts local authorities, partnerships and police forces can receive automated performance reporting on the effectiveness of enforcement, the state of the infrastructure, the activity of operators; and an agreed data set could be published online to ensure transparency & accountability.

² <http://www.thamesvalley.police.uk/rdsafe/rdsafe-roadpol/rdsafe-roadpol-speedenforcement/rdsafe-roadpol-speedenforcement-speedwatch.htm>

³ <http://www.roadsafetyknowledgecentre.org.uk/>

⁴ www.roadsafetyanalysis.org

⁵ www.seatbeltsafe.com / www.drivetechyds.com/

RENEWING TECHNOLOGIES

Having worked in the IT industry, there is an old adage that passes around that profession: “It is common to overestimate the power of technology in the short term and underestimate it in the long term.” If both errors are to be avoided, a sensible strategy for engagement of technological solutions should be examined as a priority.

Looming like a heavy storm cloud on the horizon across a large part of the country is the issue of ageing enforcement technology; the majority of fixed camera sites are still utilising the old ‘wet film’ technology which will become redundant within the next few years. Whilst digital alternatives exist the option to upgrade the aging stock of cameras is a delicate financial balancing act. Some partnerships have started along the digitization process⁶ although they are in the minority. It seems clear that the reason for upgrading in the future will be necessity rather than efficiency savings as the arguments for saving money through digitization don’t stack up. The cost of loading cameras with film and then developing it to a stage where it can be viewed is relatively low when compared to other partners of the administration systems. Unless there is an intention to load all cameras permanently, thereby saving on the staff costs associated with rotating cameras, then it would take decades⁷ to recover the initial outlay.

In the majority of cases partnerships do not possess the kind of capital required to facilitate the wholesale process of digital upgrades; resulting in the need for a new solution here as well. The first thing partnerships need to consider is the need for enforcement at each individual location, taking into account new technologies that may offer better speed and casualty reductions where appropriate. Partnerships and local authorities will then need to source funding, possibly through grants, but more likely via more accessible business models including leasing equipment.

FOOTING THE BILL

The need to upgrade equipment may sound like a call for far greater investment at a time of stringent cuts; that is not the case. It is about investing in the areas that will give the greatest return. Improving efficiency of enforcement processing would cost virtually nothing with efficiencies outstripping costs associated with downsizing and set-up costs within a short timescale. It would require some determination on behalf of Home Office & DfT to ensure that the barriers are quickly removed so that it can happen; technology suppliers are queuing up to fill the space and start delivering lower cost solutions.

In some cases Government investment will be appropriate to develop innovations that would otherwise be cost-prohibitive even for large local authorities. Choosing such projects should, however, be cognoscente of the future benefits; particularly scalability, replicability and sustainability.

One clear example of this is the [MAST Project](#), an award winning⁸ national road safety project to provide cutting edge national data analysis and market leading customer insight for professionals developing interventions. The innovation came from Thames Valley, the grant funding of around £180k was made by the Department for Transport, but the impact is being felt nationally, and now over 150 organisations across the country share the costs of a product that they all benefit from using through modest subscriptions. Without government funding the idea would have been shelved 3 years ago, with investment it has been scaled-up to a

⁶ E.g. [Cumbria & Hertfordshire](#)

⁷ For example, In Thames Valley it currently costs around £100,000 to rotate cameras around 296 housings. The upgrade costs for those housings and the back office equipment have been estimated in excess of £3m.

⁸ [Highly Commended, CIHT Awards 2010](#)

national system that is on a secure self-sustaining business model that will continue to bring improved efficiency for years to come.

An alternative approach might be taken with a project like '[Embrace Life](#)' from the Sussex Safer Roads Partnership. The highly acclaimed one minute video is superbly produced and the partnership has received expressions of interest in using it from across the country and around the world. At present there is no 'business model' to incentivise the local authorities who back these creative ideas to develop them and be rewarded for their innovative work. Developing the capacity of highly skilled and progressive road safety functions currently within the public sector to balance the lost grant revenues through trading their expertise and intellectual property might be a way to support projects like Embrace Life in the future.

FIT FOR PURPOSE

Road Safety has a long way to come and a short time to get there if it is to thrive under the current financial constraint. Innovation is undoubtedly part of the answer, but delivering innovative solutions requires sufficient lead time to overcome the technical and, vitally, human factors that are barriers to change.

The climate of fear that presently exists in the public sector is not necessarily conducive to clear strategic thinking, however, it presents an opportunity because there is a willingness to countenance changing systems and structures at a pace that would have previously been disregarded as foolhardy or unrealistic.

There is a need for leadership that is willing to set a strategic direction and to promote the tools, programmes and personnel that can take road safety into the future. That leadership, at a national and regional level, must lay hold of and articulate a clear vision of road safety delivery for the years ahead in order to create an atmosphere of confidence that the safety and security of our citizens on the road remains a priority worth investing in.

Successfully creating and maintaining this atmosphere is crucial to keep the best talent working in road safety, to keep the commercial sector investing in road safety and to ensure that road safety in Britain is truly fit for purpose to keep on delivering the world's safest roads.

ABOUT THE AUTHOR

Dan Campsall is the Communications Manager for the Thames Valley Safer Roads Partnership and also a director of Road Safety Analysis Limited. Dan has a background in marketing and has worked in the field of Road Safety for the last 7 years where he has been involved with a number of award winning innovative schemes.