

## Plotting Crimes: Too True to Be Good? The Rationale and Risks behind Crime Mapping in the UK

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Fraser Sampson L.L.B., L.L.M., M.B.A., Solicitor, is Chief Executive of the West Yorkshire Police Authority, and Fiona Kinnear B.Sc. (Hons) is Research Director at the Authority. Working closely with the West Yorkshire Police, the West Yorkshire Police Authority has been leading the way in crime mapping in England and Wales since 2005. Beatcrime, their award-winning website, is unique in using dots-on-maps to show recorded crimes and trends down to street level and to make that information available to the public. While this approach has been recognized by bodies such as the National Policing Improvement Agency, the question of how much detail the public are entitled to expect from their criminal justice agencies and how much those agencies should withhold remains a contentious area in the UK. This article considers some of the competing arguments against the backdrop of increasing demands for public access to civic data.

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If knowledge is power, information is the natural energy source on which it depends. In the context of public information generally, and criminal justice in particular, that energy source appears to be in short supply. As the clamour for more information gains both global momentum and political attention, policing organizations across the UK are under pressure to make their crime data available to their communities. How this has come about and what strategic challenges it brings with it are the subject of this article.

What follows is an analysis of the route by which crime mapping has taken hold within England and Wales, the key drivers behind its development and the strategic challenges for its future.

### ► **The route to crime mapping in England and Wales**

The need to provide better public information on criminal justice matters has been recognized for some time within the UK and to that extent, the demand for maps illustrating where crimes have been committed is nothing new; however, it is only in the last few years that the efforts to do so have come front and centre of policing

policy, with the last 12 months having been particularly prominent. Now that the government has required all police forces to provide information around crime and criminality in their areas, the needs and benefits are becoming apparent; so too are some of the difficulties.

In what was reported as being the first fully accessible and interactive system in England and Wales to provide the public with local, up-to-date crime information on a map,<sup>1</sup> the West Yorkshire Police Authority launched a website called Beatcrime<sup>2</sup> in 2005. Originally created by the Police Authority,<sup>3</sup> the website is supported by the West Yorkshire Police with whose data the site is populated and its title reflects both the objective of tackling crime and the illustration of recorded offences by local area (historically known as ‘beats’). By entering a postal code and selecting a crime type, people were able to view for the first time the crime picture of their local area, either as dots marking the approximate location of crimes reported in the previous month (often on maps going down to street level) or as bar charts, comparing crime levels for each month with those for the previous year. Since its launch, the site has become established in the range of tools available both to the public and the Police Authority to hold the police to account. The site also raises the profile of the Police Authority and helps the public to associate it with the monitoring of police performance and crime and disorder reduction.<sup>4</sup>

This award-winning website attracted over 40,000 hits in its first year—by January 2009, it received almost the same number in a month. Among many innovative features the Beatcrime website has, two are of particular interest in the sphere of public information provision. The first is that, as noted *supra*, it was the first website of its kind among UK police organizations; the second is that it was, and remains at the time of writing, the only crime mapping system to use ‘dots-on-maps’ when displaying crime statistics. It is the latter of these features that has attracted interest recently—and that has also given rise to some cautiousness on the part of other policing bodies in the UK.

Before considering the implications of the various approaches to crime mapping by police forces in England and Wales, it is helpful to look at the backdrop against which these developments have taken place along with the developments relating to data access generally.

## ► Civic data access

Beyond pure crime statistics, there is clear evidence of a growing mobilization of public pressure for greater access to official data *per se*, and not only within the UK but on a global basis, to the extent that the provision of accurate and timely civic data is becoming a central component of the democratic process.<sup>5</sup>

Whether this truly world-wide phenomenon is born of greater concern for ensuring transparency and accountability in our public services or whether it is simply a discrete manifestation of an increasing but discerning appetite for what might be categorized as civic data access (CDA) is unclear. There are however many examples of what is almost a political movement with global ambitions towards accumulating

and unmasking civic data to be found on many websites and search engines. Ranging from, for example, the Open Govt Data movement that claims to represent exponents of e-advocacy to the proponents of e-activism (such as DemocracyInAction.org) the presence, popularity and proliferation of these e-communities is illustrative of the public demand for more civic data.<sup>6</sup>

Just what qualifies as 'civic data' is uncertain; but the following is offered as a useful working definition, based on the communications from these organizations:

'Civic data' are those sets of information created and maintained by public organizations and paid for at the public's expense as part of the day-to-day activities of local or national government.

As such civic data can include things as diverse as crime data, the number of street lamps on a stretch of road, the sentences handed down by particular courts or the allowances paid to public officials. Though it is not always clear from some of the material available, the CDA argument appears to be based on the proposition that—to the extent that raw information can attract proprietary rights—such data are *owned* by the public and therefore ought to be made available to the public. There is force in this argument. Even if the jurisdiction of the country concerned fails to recognize the ownership of raw information, there is no gainsaying the fact that the creation, classification and cataloguing of these data (i.e. all the activities that give it its inherent value) are funded by the taxpayer. Plainly, this is not the same as accepting that *all* such data collated by the State on our behalf must therefore necessarily be disclosed (in full or at all) to the general population—otherwise information affecting defence, civil nuclear programmes, and vulnerabilities in the critical national infrastructure, etc. would present a significant strategic risk. But perhaps in the case of civic data, there should be a general presumption in favour of public disclosure, a presumption that will only be rebutted by a substantial, evidenced and proportionate case such as a real threat to national security. In any event, the call for access to civic data is a real and growing phenomenon and forms the background against which the more specific crime mapping activities of policing organizations are taking place.

## ► Crime mapping

It is within the broader context of this CDA *Zeitgeist* that police organizations have been coming under increasing pressure to divulge information about criminality in their area.

While the West Yorkshire Police Authority launched its seminal website in 2005, it was not until 2008 that crime mapping really took off in England and Wales. The reason was the coincidence of several key publications and events in the summer of that year that significantly raised the profile of crime maps, lending them the strategic lift and speed necessary to get the subject into the already crowded skies over UK policing governance. These events can thus be summarized as follows:

1 On 3 May, the charismatic media personality and Member of Parliament, Boris Johnson, successfully challenged Ken Livingstone for the office of Mayor of London.<sup>7</sup> As the Chairman of the Metropolitan Police Authority (a position accompanying his mayoral appointment), Mr Johnson became a keen

advocate of crime mapping almost as soon as he took up the role<sup>8</sup> and has continued to promote the principles of making such information available to the public ever since.

2 On 18 June, Tony Blair's former advisor on anti-social behaviour, Louise Casey, reported her findings following her extensive research into public expectations of the criminal justice system at a neighbourhood level (*Engaging Communities in Fighting Crime*, 2008). Ms Casey recommended that police forces should be required to publish monthly crime information and to include what action is being taken to tackle crime, contact telephone numbers, e-mail addresses and how to complain if dissatisfied.<sup>9</sup>

3 On 17 July, the government published its Green Paper 'From the neighbourhood to the national: policing our communities together'.<sup>10</sup> In this much-debated paper, the government set out its national proposals for the strategic reform of policing in England and Wales. Among the many themes and strands on which it drew, the paper identified the type of information that the public said they wanted from their police organizations and the role that policing organizations should play in providing it.

In the Green Paper, the government also accepted the findings of a national research project the same year, showing that victims' satisfaction correlates directly with the quality and responsiveness of their contact with the police and the information they receive.<sup>11</sup>

4 And in December, the first national Policing Pledge was introduced as part of the government's wider agenda for policing reform. Taking the form of a national promise of service priority and delivery signed up by all 43 chief constables in England and Wales,<sup>12</sup> the thinking behind the Pledge is supported by other broader research that shows how public confidence improves when the police deal with local priorities (Tuffin *et al.*, 2006). Thus creating the Policing Pledge commits chief officers to a series of things ranging from response times to call handling and also includes an undertaking to provide information and crime mapping as a specific clause.

At the same time as these events occurred, the need for reliable, accessible and meaningful information on crime and the criminal justice system clearly evidenced within the key reports was robustly corroborated in an independent report by *Giangrande et al.* (2008). Relying on its extensive review of the evidence on the subject, the researchers concluded that

Britons have become "passive bystanders", uninformed about crime and punishment and less likely to participate in maintaining justice than people in other countries. The report went on to highlight the importance of providing information thus: Poor information is the key barrier to the active engagement of society in lawfulness. On the one hand, individuals do not understand the true level of crime in their area, increasing fear of crime. On the other, individuals are unaware of the activities of the criminal justice system, increasing their disassociation from it, and making them suspicious about whether perpetrators are dealt with.<sup>13</sup>

All these events and publications served to bring about two things: they drew greater public and political attention to crime mapping and made the link between information provision and public engagement, conspicuously and repeatedly. Once the attention had been caught and the link accepted, only a short step is required to connect information provision with what is becoming the supra-ordinate aim of public bodies in the UK: that of public confidence.

## ► Linking information and confidence

If we accept the premise that information is the natural energy source fuelling empowerment, it should follow that informing the public will give them greater power. It is reasonable to hypothesize that a degree of empowerment—or at least a reduction in feelings of impotence—increases confidence on a general human level (Baranski and Petrusic, 1995). What then is the effect of the presence or absence of information on public confidence in the specific context of policing? The links between the provision of accurate crime data and greater confidence among the populace are probably borne out intuitively and empirically; but they are also made out on the more persuasive epistemological and practical levels too.

Taking first the general experience of CDA and the research cited above, it is clear that, without information, the public become too remote from the realities that influence and characterize policing and criminal justice in their area. Leaving aside the difficulties of identifying—let alone categorizing—‘the public’ (a term which appears to include everyone when not at work), the link between provision of information to members of communities affected by criminal activity and the confidence within those communities is clearly made out, both within the Casey report and that of Giangrande. According to the former

the public see the criminal justice system as a distant, sealed-off entity, unaccountable and unanswerable to them or to Government. In part this distance is created by the fact that little information about what happens to those who commit crime is placed in the public domain.

In a report commissioned by the government, Professor Adrian Smith argues that [At the local level] trust and confidence are closely related to perceived relevance, accord with experience and the local dialogue with law enforcement agencies, notably the police.<sup>14</sup>

As for the practical correlation between confidence and information, the authors of the Reform report go further. They are prepared to argue that, not only is there evidence to suggest that the traditional remoteness they found in our criminal justice sector goes unaddressed by some organizations, but that this is in fact the organisations' intention in doing so; denying the public information to create electoral advantage or avoid scrutiny. This second proposition is corroborated elsewhere, one example of which is the reporting of Heather Brooke who has said:

The police in Britain feel they "own" crime data and the public have no right to know what is happening.... In a void of ignorance, a politician or police chief can claim anything [they] like about crime: that binge drinking is endemic or under control, that muggings are increasing or falling, that policing is working or failing.

She goes on to allege that this withholding of data allows the police to ‘hide their failings’ citing Northumbria Police who, she maintains, claimed that only three crimes of note had occurred one weekend in May 2008, yet a freedom of information request revealed that there were more than 1,000 incidents, 161 of them being violent.<sup>15</sup>

Whether or not these accusations (which is, in truth, what they are) are a fair deduction from the research is a separate matter; what is important here is that the reports clearly evince the nexus between information, effective public engagement and confidence.

The provision of meaningful data however is not just a matter of data disclosure; it also requires a clear understanding and accommodation of the 'end user'. In this context, it is useful to note the findings of a government survey that showed that 47% of the UK population cannot understand 'straightforward, mathematical information' nor can they 'independently select relevant information from given numerical information'.<sup>16</sup>

Such shortcomings in data analysis notwithstanding, in the context of policing and criminal justice Louise Casey's research in 2008 also restated the importance of informing communities about what is really happening in their area. Again, this may not always have a wholly positive effect in and of itself, and there is evidence to show the asymmetric way in which the release of information by decision makers can be received (White and Eiser, 2005). In light of what we know, from the research of Casey and Giangrande and others, it is fair to conclude that the provision of relevant and meaningful information—good or bad—is at least essential to public *understanding* and *contribution*. As it is also important—either as a positive or negative influencing factor—to the wider issue of public confidence, there is an important practical and political element for policing in the UK, which is as follows.

The government intends to sweep away the morass of police performance targets, replacing them instead with a single measure—that of public confidence.<sup>17</sup> Together with the introduction of the Policing Pledge, this will mean that it is more important than ever for policing bodies to make information available to the communities in which relevant criminal activity, and the corrective activity of our public services, takes place. The 'single target' of public confidence was put in place at the same time and for the same reasons as the Policing Pledge: to increase the local accountability of the police and to empower communities.<sup>18</sup> While there is still consultation on some of the finer aspects of measurement and calibration, improving confidence rates will be of supra-strategic importance for all involved in policing governance and delivery in the years to come.

In this way, those responsible for the strategic direction of policing have not only accepted but also openly embraced the connection between the provision of timely and accurate information and the creation of public confidence. This marks an acceptance of a premise that has become embedded in jurisdictions such as the USA for years: that if people are either to consider doing anything about crime or, at least to frame the questions they ask of those whose job it is to do so—they need an accurate (as opposed to a purely apochryphal or anecdotal) picture of criminal activity in their neighbourhood. Of course, it could be argued that providing accurate crime data that reveal high levels of serious crime in a certain locality would *reduce* confidence in some areas on the basis that this would amount to official confirmation of people's worst suspicions and that things *are* in fact as bad as they seem—or perhaps worse. This argument may have some merit<sup>19</sup> although there is little independent research available to make the case in the UK, but it is clear that there is a growing body of opposition to the publication of crime data that is *too* accurate or *too* specific. And

therein lies the fundamental dilemma of the crime mapper, a dilemma that appears to be predicated on the regulatory arrangements for the publication of data.

## ► Too true to be good?

It is proposed that, in the context that concerns us here, data are either accurate or useless. For example, knowing that an area of several hundred kilometres<sup>2</sup> has no more than an 'average' (however computed or arrived at) number of robberies this year is perhaps of little value if someone is trying to get a picture of how violent the streets are around their child's school or the roads around their parents' home. Similarly, is it any better knowing that there was some vague form of dishonesty offence (but not burglary) committed somewhere near X Street or the junction of Y Road at some unspecified point in the past 6 months?

When it comes to crime information, it is submitted that, other than to the ostrich population, the degree of confidence that can be derived from data is in direct proportion to their accuracy. For it to be of value to the police, crime information must be sufficiently specific to inform decision makers promptly, consistently and reliably about that which concerns them most. The same must be true of the rest of us. However, the framework regulating data protection and publication in the UK works in almost the opposite direction: the greater the degree of proposed specificity the greater the risk and therefore the greater the regulation militating against it.

Plainly there are certain crime types where the very nature of crime requires particular sensitivity, and this is recognized expressly in criminal statutes so far as the law of England and Wales is concerned.<sup>20</sup> But in terms of other more generic but sensitive data, it is the civil legal arrangements regulating publication and disclosure that present a barrier to organizations wishing to make information accessible to the public.

This tension became apparent in the early stages of development of crime mapping by police organizations and the Office of the Information Commissioner wrote to several police organizations urging great caution before moving towards what was being described as a 'New York' model of crime mapping. Boris Johnson's reported response for the Metropolitan Police was to amend their mapping website and make the data far less specific than had been originally planned.<sup>21</sup> This was clearly a move away from what the Conservative party leader David Cameron had originally encouraged: he had exhorted every police force in the country to record every crime online, every month, in map form.<sup>22</sup>

In addition, some organizations such as the Jill Dando Institute, have expressed real concerns around the publication of crime data that are too specific or insufficiently controlled and contextualized. In what they regard as 'the worst cases', they maintain that crime mapping

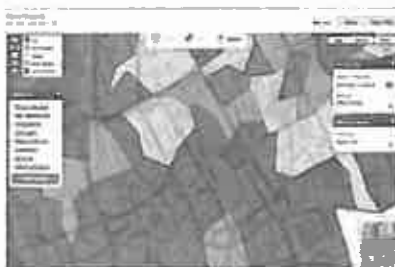
...may actually increase the public's fear of crime, prompt greater scepticism over crime statistics and generate more negative debate about the performance, accountability and transparency of police forces and [statutory crime reduction partnerships].<sup>23</sup>

This response finds some support in wider research around the nexus between trust and the provision of information and, in the context of policing, it is not yet safe to assume that greater candour will always produce greater confidence (White and Eiser, 2007). The general response from crime data providers has therefore, perhaps unsurprisingly, shown a similar degree of caution to that of the Metropolitan Police, with two approaches being adopted. The first approach is the 'choropleth' model,<sup>24</sup> used in one form or another by all other police organizations in England and Wales; the second is the West Yorkshire model showing dots-on- maps.

## ► Hotspots and averaging

If the primary purpose of providing crime data is to inform people who are interested in or intending to involve themselves with a location, the data need to have a degree of specificity that supports that aim.

As the US Department of Justice website explains, crime is not spread evenly across maps; rather it tends to congeal around some areas and is absent from others. People can (and do) use this knowledge in their daily activities, avoiding some places and seeking out others with their choices of neighbourhoods, schools and recreation areas being influenced by the knowledge that their chances of being a victim are increased or reduced accordingly. In short, crime is not evenly distributed and the risk of our being a victim of crime is not geographically constant. Therefore, to provide crime data in a way that highlights hotspots or averages out the areas of offending as though they were areas of equal atmospheric pressure joined by isobars is of limited utility to the literal and figurative 'person in the street'. But this is what the vast majority of crime mapping sites in the UK do. Following an ellipse or choropleth methodology, these sites seek to join areas of similar criminal activity and illustrate them either with general hotspots or by delineating a large swath of a map and applying a colour to it (see Fig. 1).



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Figure 1: Extract from the Metropolitan Police crime mapping website

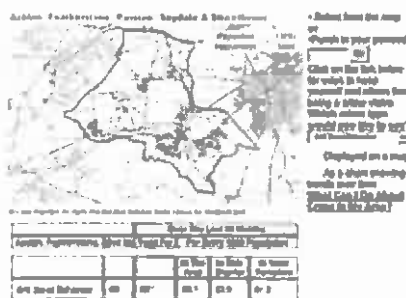


Figure 2: Extract from West Yorkshire's Beatcrime map

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In this way the ellipse and choropleth maps imply that the designated areas share the same risk level, rendering specific streets or locations irrelevant. But their lack of relevance does not only relate to the methodology and its underlying assumptions: it is equally irrelevant to persons trying to access the data in order to inform decisions about their life and livelihood. This criticism finds support from Professor Adrian Smith who states that more and better crime information has to be available at a sufficiently local level and communicated in a form that relates to the individual member of the public's day-to-day experience of living or working in an area.<sup>25</sup>

## ► Beatcrime

Whether or not the reticent approach of other police organizations and the attendant shrinking from full and frank disclosure provides evidence of what the outgoing Chief Inspector of Constabulary referred to as the inherent 'risk aversion' to be found throughout UK policing (Flanagan, 2008) is debatable. What it does demonstrate is the gap between ambition and delivery in crime mapping within England and Wales.

In contrast, the approach adopted in West Yorkshire has sought to reconcile the tensions between accessibility and sensitivity with a clear focus on the public interest and a bias towards accuracy.

Naturally, the West Yorkshire model recognizes that there are sensibilities around certain types of crime and criminality, as well as legal restrictions on publishing information from which victims might be identified. Similarly, although someone suitably motivated and having the right software could possibly extrapolate from the West Yorkshire data a specific address outside which a car had been stolen or a person robbed, but is this a reason to withhold or adulterate all the data all the time? An alternative approach that has been suggested involves 'moving' the locus of the offence a set distance in a random direction (say within a radius of 30 m). While this would certainly reduce the likelihood of identifying a particular person or place, the

adulteration of the data would surely have a similar diluting effect on its utility and therefore its efficacy in informing and empowering the public. There is, it is proposed, an irreducible minimum beyond which data become so vague as to be at best unhelpful and at worst damaging to public confidence in that it dashes expectations and hints at disingenuousness.

For this reason, the West Yorkshire Beatcrime model plots reported crimes down to the street where they occurred and, although there are special considerations for isolated places (e.g. remote dwellings within farmland), the approach tries wherever possible to identify the true location of the crime.

Notwithstanding these efforts, Giogrande *et al.* remain critical of the lack of specificity in the information provided by those police authorities such as West Midlands and West Yorkshire who do make such information available (although they do describe a Metropolitan Police test site that provides burglary, robbery and vehicle offences per month and yearly trends as ‘promising’).

Though compared, these sites are not comparable because, at the time of writing at least, the degree of detail provided by police bodies in England and Wales is not simply variable but also binary: the only police force providing specific ‘dots-on-maps’ type information about specific geographical locations is the West Yorkshire Police. Nevertheless, bloggers and commentators from the CDA community go further than Giogrande and make the argument *supra* that averaging should be avoided altogether, and point data should be used instead, with all maps having overlays to explain crime spikes and day/night splits. On the other hand, the highly regulated environment of the UK places some real hurdles in the way of public bodies that wish to open their data banks to scrutiny, at the heart of which beats the European Convention on Human Rights which seeks constantly to balance the competing interests of the individual, the State and the wider public good. Beneath that framework there is the domestic legislation such as the Data Protection Act 1995 (which applies a series of principles that must be applied by all who keep personal data records) and the Freedom of Information Act 2000 that is designed to facilitate public access to data collated by public bodies. Responsibility for overseeing the operation of this legislative framework generally falls to the Office of the Information Commissioner (OIC) who wrote to a number of police organizations and the Home Office during the development of crime mapping identifying areas of potential conflict between the rights of individuals and the wider public interest and seeking reassurances before their sites went ‘live’.

Since the enactment of the Human Rights Act 1998 in the UK, there have been some significant and substantial challenges to the State's collection and use of personal data for criminal justice purposes—most notably the challenge to the police practice in England and Wales of retaining DNA data on individuals even after they have been found not guilty of an offence or proceedings against them have been discontinued (*S & Marper v UK*, 2008). Interestingly, the OIC has itself recently required the government to abandon its practice of withholding details of parties to employment disputes and to reveal the names and addresses of organizations involved in proceedings before the employment tribunals.<sup>26</sup>

Nevertheless, despite the provisions of the freedom of information regime and the decisions of the OIC, there remains something of a contrast between the UK and the

much more open data culture elsewhere, for example the USA where, although there are similar federal and constitutional laws balancing privacy with publicity, practices are distinctly different and prosecution policies are openly discussed on weblogs and in public forums. Giogrande recognizes that the legal and cultural approach in countries such as the USA differs significantly from that of the UK and cites some very useful examples that evidence the position (Privacy Rights Clearinghouse, 2006; Kerr and Shelton, 2001).

## ► The future

The corollary to CDA is a reverse flow of information *from* communities back towards their public services. Indeed if the Policing Pledge in the UK is to take the form of a sort of contractual undertaking, then beyond the basic *consensus ad idem* there needs to be some ‘consideration’ flowing from the other contracting party: the citizen. This remains a largely unexplored benefit of crime mapping and is one that it will potentially allow a two-way exchange of information between the police and the policed. Though yet to mature, it is easy to see how this two-way interaction using crime mapping might work. By choosing to visit the site, individuals are indicating their interest in the work of the relevant policing organization. As such these visitors form a self-selecting group who might be interested in helping the police in other consultation programmes or in wider participative activities that address the issues underlying the published statistics, from crime detection to preventing violent extremism. Not only would this fit within the generic statutory obligation on police authorities in England and Wales to consult with their communities; it would also be consonant with the strategy, for example, of the West Yorkshire WaYs to meaningful engagement.<sup>27</sup> Interactive mapping will help the Police Authority to show what has been done and indicate where the improvement is to be found, before beginning the consultation cycle once more.

The crime mapping system can also have benefits in terms of performance monitoring, testing the effect of policing initiatives and the visibility of information provision down to a neighbourhood level, with the nature, frequency or content of visits to the site revealing something about the user or usage. Postal or zip code trawls will allow the site host to group the areas of search and therefore see, for example, if there has been any increased activity in enquiries around an area where there has been targeted action or communication. But then this activity itself raises questions of data monitoring and privacy. Then there is the larger consideration of expense; maintaining up-to-date sites is an expensive endeavour—which might be why most examples of crime mapping sites in the USA are not maintained by the police at all but by external bodies to whom the crime data are given by the relevant criminal justice agency.<sup>28</sup> Providers of UK crime maps will need to consider these practicalities as the expectations of their communities become increasingly sophisticated in their demands. An alternative to outsourcing control of the sites might be some form of commercial sponsorship (for example with an insurer) or at least partnership with other public sector organizations.<sup>29</sup>

## ► Conclusion

However they map out, the activities of the 43 police forces of England and Wales will carry some risk in the future. The first risk is that they are challenged under the regulatory framework for maintaining individual privacy. Another is that they might be challenged by business interests such as estate agents claiming that the publication has adversely affected already falling house prices.<sup>30</sup> The answer to such challenges surely lies in the fact that it is not the *publication* of the data that ought to concern us but rather the fact that the crimes have occurred. In addressing the situation complained of, it is interesting to ask the question "which of the following is preferable: galvanization of joint efforts to prevent the reality of criminal activity in a particular area or suppression of the truth in order to create a more favourable but inaccurate perception?" Is this really what public confidence requires? But there are, it is submitted, far greater risks. One, highlighted by Giogrande, is that the crime mapping sites fail to go beyond mere presentation of a criminal activity and avoid stating what was done about it. In his view, merely presenting detail of the crime without the correction gives a very unbalanced view of UK criminal justice to the public.<sup>31</sup> In this light, there must be a strong argument in favour of, for example, sentence mapping showing how cases are disposed of at each court within a locality for the same reasons as crime mapping: to provide clear and reliable evidence of the relevant activity being undertaken by the criminal justice system and also to address any perception that the courts are being unduly lenient with those they convict.<sup>32</sup>

Whatever the manner and form that criminal justice 'mapping' takes in the future, in mitigating or closing out the relevant risks, the challenge for public authorities will be to balance accuracy with sensitivity and privacy. While in technological terms 'the use of statistical devices of various kinds on maps is limited only by the analyst's imagination' (Harries, 1999); the reality for those policing organizations seeking to produce accurate and useful crime maps in the UK is 'far harder than it appears' and—as the Home Office has been warned—'does not rely only on geographical information'<sup>33</sup> though, at the request of the Home Office, Pitney Bowes MapInfo has at least released a white paper on best practice<sup>34</sup> to help them. The paper itself envisages fundamental problems because 'a significant amount of crime goes unrecorded, location may be uncertain, and time of day, seasons and even the activities of the police will make figures vary'<sup>35</sup> and suggests a wide amount of consultation with local authorities, social, health and emergency services, MPs, community groups as well as 'crime pattern influencers', business groups and others—including presumably the e-advocacy and e-activists referred to above.

Further risk resides in the outsourcing options and the possibility of data sets being given to or taken over by the daunting array of professionals (lawyers, copyright experts, librarians, archivists, cartographers, engineers, communications activists, open source programmers and new media designers) prepared to offer their services in helping to make civic data and information 'available to citizens without restrictions, at no cost, in usable open formats'.<sup>36</sup> This would potentially lead to loss of control, consistency or (ironically) confidence.

But perhaps one of the greatest strategic risks is that all 43 organizations will continue plotting their own crimes in their own way and proliferating a maze of systems that

not only prevent public access to accurate data but also preclude any meaningful comparison across what are, in the end, entirely artificial boundaries.

Whatever the future direction of crime mapping, former crime reporter Heather Brooke says<sup>37</sup> that we cannot afford to ignore the issues set out here.

When the deadline for all police forces to make crime mapping information available expired at midnight 31 December 2008, those organizations still faced something of a dilemma but ultimately the response to the growing expectation of civic data provision will call for the exercise of mature judgment.

From a starting point that, as it has been collated and processed and analysed at the public's expense, the public have substantial intellectual property rights in the data sets, if people in communities are seriously expected to make a meaningful contribution to the debate around their public services, let alone assist in shaping their delivery, those in charge of the services must make sure that they are able to access the relevant information needed to make sense of the challenges. The biggest risk is, it seems, that public bodies are not yet fully willing or able to do so.

## ▶ Notes

<sup>1</sup> *Police Professional*, 31 July 2008. ↗

<sup>2</sup> [www.Beatcrime.info](http://www.Beatcrime.info). ↗

<sup>3</sup> In England and Wales, the police authority is the legal body corporate that employs staff and provides governance to the relevant police force whose resources and officers are under the direction and control of the chief constable/commissioner (see the Police Act 1996). ↗

<sup>4</sup> *Police Professional*, *ibid.* ↗

<sup>5</sup> For example, see <http://icicp.blogspot.com/>; <http://www.projectcensored.org/>; <http://www.opendemocracy.net/article/china-democracy-in-action>. ↗

<sup>6</sup> See also Citizens for Open Access to Civic Information and Data that describes itself as a 'loose grouping of academics, activists, and citizens concerned with promoting data liberation in Canada'. ↗

<sup>7</sup> *The Guardian*, 3 May 2008. ↗

<sup>8</sup> *The Register*, 23 June 2008. ↗

<sup>9</sup> *The Times*, 18 June 2008. ↗

<sup>10</sup> Cm 7448. ↗

<sup>11</sup> *Closing the Gap*, MORI 2008. ↗

<sup>12</sup> [www.direct.gov.uk/policingpledge](http://www.direct.gov.uk/policingpledge). ↗

- <sup>13</sup> Ibid. ↗
- <sup>14</sup> *Crime Statistics: An Independent Review Carried Out for the Secretary of State for the Home Department*, November 2006. ↗
- <sup>15</sup> *The Times*, June 26, 2008. ↗
- <sup>16</sup> Skills for Life Survey 2003, DFES research report 490. ↗
- <sup>17</sup> Home Office Press Release, 5 March 2009. ↗
- <sup>18</sup> See comments of the Policing Minister Vernon Coaker, MP, *The Daily Telegraph*, 7 January 2009. ↗
- <sup>19</sup> See, for example, observations of the Police Federation of England and Wales, *The Daily Telegraph*, 7 January 2009. ↗
- <sup>20</sup> See, for example, the Sexual Offences Act 2003. ↗
- <sup>21</sup> *The Register*, 25 June 2008. ↗
- <sup>22</sup> <http://www.freeourdata.org.uk/blog/?p=194>. ↗
- <sup>23</sup> [http://www.jdi.ucl.ac.uk/crime\\_mapping/web%20statistics.php](http://www.jdi.ucl.ac.uk/crime_mapping/web%20statistics.php). ↗
- <sup>24</sup> A technique used in Europe from the early 19th century but a term generally attributed to a geographer, J. K. Wright, with the American Geographical Society (AGS) in New York City in 1938. ↗
- <sup>25</sup> Ibid. ↗
- <sup>26</sup> OIC, 14 October 2008. ↗
- <sup>27</sup> This follows a cycle of *We* asked, *You* said, *We* acted, *You* saw. ↗
- <sup>28</sup> For example, U.S.: Crime Reports: ‘Crimereports.com is a US site built to help citizens get more information about the locations and frequencies of crime incidents in their cities.’ ↗
- <sup>29</sup> For a good UK example, see the LASOS system operated within South Yorkshire with the support of the local government of Yorkshire and Humber—[www.lasos.org.uk](http://www.lasos.org.uk). ↗
- <sup>30</sup> See the comments of the Royal Institute of Chartered Surveyors, *The Daily Telegraph*, 7 January 2009. ↗
- <sup>31</sup> Ibid, p. 9. ↗
- <sup>32</sup> This, according to Casey (ibid.), is the single biggest contributor to public confidence in the criminal justice system. ↗
- <sup>33</sup> *The Guardian*, 11 December 2008. ↗
- <sup>34</sup> Pitney Bowes MapInfo Press Release, ‘Crime in Focus’, 2 December 2008. ↗
- <sup>35</sup> *The Guardian supra*. ↗

<sup>36</sup> Citizens for Open Access to Civic Information and Data. 

<sup>37</sup> Ibid. 

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