

## Report:

Identifying and quantifying the market for a web-based interactive geo-statistics crime mapping solution

Version 1.0

Author: Spencer Chainey

The Jill Dando Institute of Crime Science University College London 2<sup>nd</sup> Floor Brook House, 2-16 Torrington Place London, WC1E 7HN Tel: 020 7679 0806 www.jdi.ucl.ac.uk

20<sup>th</sup> February 2006

This report was produced as a result of a commissioned consultancy project by a software and services company, to provide an independent viewpoint into the potential development and market for publishing crime statistics using crime mapping. It also acts as a useful historical record on the publishing of crime statistics using crime mapping at this time (February 2006) – prior to the publication of the Statistics Commissions review on crime statistics (2006) and the Smith review (2006).

Smith, A. (2006) Crime Statistics: An Independent Review. Carried out for the Secretary of State for the Home Department. London: Home Office.

Statistics Commission (2006). Crime Statistics: User Perspectives. Report Number 30. London: Statistics Commission.

#### 1. Introduction

This report reviews and explains the nature of the policing and Crime and Disorder Reduction Partnership (CDRP) market and quantifies the demand for geo-statistical reporting tools. It includes examples that demonstrate how crime statistics are currently presented, and this market's use of similar web-based tools.

#### Content

2.	The market	
3.	The market demand	3
4.	Summary	14
App	pendix	16

#### 2. The market

#### 2.1. Police forces

There are 43 Police Forces in England and Wales, and a further 8 forces in Scotland. It's useful to consider the two areas separately because they fall under different legislation that affects how they operate.

Each of these police forces are further divided into Basic Command Unit areas (BCUs). There are 347 BCUs in England and Wales. These BCUs are closely aligned to local authority geographic boundaries (i.e. a BCU is in most cases equivalent to a local authority area).

In Scotland each force is split into territorial divisions or command areas. These are of similar size to BCUs but more loosely follow the local authority landscape.

The procurement structure within police forces is usually centralised. That is, any IT development is usually centrally managed at the force level, rather than individual BCUs (or command areas in Scotland) procuring separate IT products or services. This reflects how crime statistics are presented, with each force centrally managing the role of publishing crime statistics. Very rarely do individual BCUs develop their own mechanisms for presenting crime statistics online.

#### 2.2. CDRPs

CDRPs were formalised in 1998 from the Crime and Disorder Act (1998). A CDRP is a formal body with statutory representation from the local council, police, fire service

and health care trust. The CDRP has responsibility for tackling crime and disorder, and managing treatment and prevention of abuse of drugs and alcohol.

There are 376 CDRPs in England and Wales (CDRPs are also often referred to as 'Community Safety Partnerships'). CDRP boundaries map directly onto local authority districts in England and local authority county boundaries in Wales. Each CDRP is managed by a CDRP Team (also often referred to as a Community Safety Team or Safer Communities Team). These local teams are responsible for developing the Partnership's strategy and ensuring it is implemented, monitored and achieved.

Partnership working for crime reduction was only formalised in Scotland in 2003. Similar to England and Wales, Scotland now has a network of Safer Communities Partnerships that are local authority based. There are 32 Safer Communities Teams in Scotland.

#### 2.3. Central, regional and sub-regional agencies

The Home Office is the central government body responsible for police forces and CDRPs. While other national policing and crime reduction agencies do exist (e.g. the Association for Chief Police Officers, the Police Information Technology Organisation, the National Centre for Policing Excellence, the National Community Safety Network) it is the Home Office that is responsible for crime statistics and their publication at the national level. ACPO is the senior decision-making body in policing and often sets out strategies and action plans to deliver improvements and new developments in policing, NCPE is often where new doctrine and developments are first reviewed (but usually after some initial advice from the Home Office), and PITO are responsible for national strategies for IT development (often following on from recommendations and actions instructed from the Home Office, NCPE and ACPO). The National Community Safety Network is a practitioner-led organisation supporting those involved in CDRPs in England, Wales and Scotland, offering a national voice to practitioners, influencing national policy and practice and supporting the professional development of crime reduction practitioners.

The Home Office also has outposts at each of the 10 England and Wales Government Office Regions (North West, North East, Yorkshire and Humber, West Midlands, East Midlands, East of England, South East, South West, London, Welsh Assembly). Each GOR has a Home Office Crime Reduction Director with a staff responsible for supporting and reviewing the local delivery of crime reduction services, monitoring targets, and performing research.

Each region also has sub-regional research and information observatories. These are typically funded by the local district councils for the area they cover and provide a function to support the assembly and analysis of statistical information on economic data, population, housing, transport, and social issues including crime.

#### 3. The market demand

Each of the three market areas has a requirement to publish crime statistics. The subsequent report will address the reasons why police forces and those working in crime reduction and community safety have an increasing requirement to disseminate and present crime statistics (based on recent and emerging agendas).

Some forces, CDRPs and other agencies are already making use of online reporting displays. What is evident from all these is the desire to ensure that the online presentation of statistics is clear, concise, allows for immediate interpretation, and is not ambiguous. At present it is rare to find all these aims being met.

#### 3.1. Police forces

Nearly all police forces now publish crime statistics online. This is for the purpose of managing and supporting public and media enquiries on crime statistics and for supporting the force's freedom of information obligations. This online reporting also aims to demonstrate how the force is performing in relation to its targets and to support a positive message that addresses the public's fear of crime.

Crime statistics are usually grouped into a standard arrangement of offence categories (there is also a national recording standard for crime incidents to ensure consistency in definition and counting). Crime counts or rates (e.g. crimes per 1000 population) are then published for these offence groups. These statistics are usually presented as tables, graphs or maps, and may come with some supporting narrative.

The figures below provide examples of the presentation of crime statistics by police forces. These show that the majority of police forces currently only publish statistics as downloadable performance management reports and very few make use or have realised the potential that comes from delivering a more interactive online interface.

Figure 1 shows two examples of the most common technique where crime statistics are calibrated and listed in a report that tells the public 'how we are doing'. While the information in this format can be comprehensive, it is a fairly dry presentation of material that may only be updated annually or quarterly, can be difficult to interpret and is typically not concise. Neither is the information usually specific to the users area (and precision of interest, in that data is presented at the BCU or only force level), or presented at a more local level in language that is of meaning to the public (e.g. the police often get carried away by using their own language of sectors, beats, and command unit areas as a means to describe places, rather than using the more familiar street names, towns and localities – this is a problem common in many examples. See the later link to West Midlands as a good example of this).

Other police forces that use this type of approach for presenting crime statistics are, Bedfordshire:

 $\frac{http://www.bedfordshire.police.uk/bedfordshirepolice/foi/how\%20we\%20are\%20doing/PAQPR\%20Q2\%202005\_2006\%20v1.pdf$ 

City of London: <a href="http://www.cityoflondon.police.uk/freedom/annual-report.html">http://www.cityoflondon.police.uk/freedom/annual-report.html</a>

Cleveland: <a href="http://www.cleveland.police.uk/news\_resources/foi/force\_performance.htm">http://www.cleveland.police.uk/news\_resources/foi/force\_performance.htm</a>

Derbyshire: http://www.derbyshire.police.uk/local/12.html#e330239

Devon and Cornwall: http://www.devon-cornwall.police.uk/v3/publrep/charts/monthly.htm

Dorset: http://www.dorsetpolice.org/infocentre/reports/crimestats.shtml

Dyfed-Powys: <a href="http://www.dyfed-powys.police.uk/publications/publications.shtml">http://www.dyfed-powys.police.uk/publications/publications.shtml</a>
Gloucestershire: <a href="http://www.gloucestershire.police.uk/neighbourhoodpolicing/18.html">http://www.gloucestershire.police.uk/neighbourhoodpolicing/18.html</a>
Greater Manchester: <a href="http://www.gmp.police.uk/mainsite/pages/performancestats.htm">http://www.gmp.police.uk/neighbourhoodpolicing/18.html</a>

Hampshire: <a href="http://www.hampshire.police.uk/FOIClasses.htm#Doing">http://www.hampshire.police.uk/FOIClasses.htm#Doing</a>
Hertfordshire: <a href="http://www.herts.police.uk/FOI/how\_we\_are\_doing.shtml">http://www.herts.police.uk/FOI/how\_we\_are\_doing.shtml</a>
Humberside: <a href="http://www.humberside.police.uk/Publications/pagefive.htm">http://www.humberside.police.uk/Publications/pagefive.htm</a>

Lancashire: <a href="http://www.lancashire.police.uk/corporatedocuments.php">http://www.lancashire.police.uk/corporatedocuments.php</a>

Lincolnshire: <a href="http://www.lincs.police.uk/index.asp?locID=30&docID=140">http://www.lincs.police.uk/index.asp?locID=30&docID=140</a>

Norfolk: <a href="http://www.norfolk.police.uk/articleListing.cfm?bctrail=0,801&catID=546">http://www.norfolk.police.uk/articleListing.cfm?bctrail=0,801&catID=546</a>
North Yorkshire: <a href="http://www.northyorkshire.police.uk/docs/PERFORMANCEyork.pdf">http://www.northyorkshire.police.uk/docs/PERFORMANCEyork.pdf</a>

Staffordshire: <a href="http://www.staffordshire.police.uk/perform.htm">http://www.staffordshire.police.uk/perform.htm</a>

Sussex: http://www.sussex.police.uk/npt/downloads/total.asp?id=midsussex

Warwickshire: <a href="http://www.warwickshire.police.uk/library/publicationscheme/howwearedoing">http://www.warwickshire.police.uk/library/publicationscheme/howwearedoing</a>

West Mercia: <a href="http://www.westmercia.police.uk/foi/howwedoing.htm">http://www.westmercia.police.uk/foi/howwedoing.htm</a> Wiltshire: <a href="http://www.wiltshire.police.uk/policingplans/perf.htm">http://www.wiltshire.police.uk/policingplans/perf.htm</a>

Stangary Deserving and Establish Orbinates  Berginsy Deserving Colonal-doubts  Colonal Comman for Deserving L. Housefulfills  Colonal Comman for Deserving L. Housefulfills  Colonal Comman for Deserving L. Housefulfills  Colonal Comman Colonal Colonal  First Tuber of Associate  First Tuber of Associate  Colonal Colonal Colonal  Vertex Establishment (Manual  Colonal Colonal  Colonal Colonal  Vertex Establishment  Vertex Establishment  Vertex Colonal  Vertex Colonal  Vertex Colonal  Vertex Colonal  Standar (Falls, Orber Johnson Colonala, Not and Affrey)  Total Velociate  Standar Colona  Standar Standard  Standar Colona  Standar Colona  Standar Colona  Standar Colona  Standar Colona  Standar Colona  Standar Standard  Stand	F25												
Sangery Deserting and Establish Difficience  Burgians' Deserting Controlled Signature (September 1)  Controll Controlled Controlled Signature (September 1)  First Note Variable (September 1)  First Note Variable (September 1)  Variable State Version (September 1)  Variable State (September 1)  State College  State (September 1)		MALLY RECOR	100			INTO PER A			CLEARED UP			LEAR UP BAT	
Ourgins' Desdering Colour-brokks:  Colouring to Desdering Literacheshis (Dessent Dessent Dessentials) (Dessent Dessent Offices (Dessent Dessent Dessent (Dessent (Dess	001/2008	2008/2004		*SCHARGE			3902/3008	2009/2004	2004/2008	2001/2003 2008/2006 2009/2009			
Surgiany Developing Colonate International Colonate International Engineering Colonate International Colonate International Engineering Colonate Internation		1	-					17171					
Borgers year Unifolity Cytoma Charles (Minister Cytoma and Research (Minister Plant Surp Syndia (Part Surp Surp Syndia (Part Surp Surp Surp Surp Surp Surp Surp Surp	1,276	1,330	. 182	-28.2	24.55	- 25.71	11.42	. 352	241	349	23,7	18.1	35.5
Chimian Learning in office Buildings  Other Chimian Learning (Missione That their Stockie Flush their Stockie Lifets Table of and Flush Variets Educations Chimian Contingen in Valencia United Chim Valencia Against the Stockie United Chim Valencia Against the Stockie Lincoln, St	947	136	504	3.4	16.37	18.36	11.50	172	143	357	28.3	(5.7	71.7
White Critics and Research Effective  That of indicine  That of indicine  That in subdisc  That shall of any firms)  Chinese Shall of any firms (Archibelog Shall of any firms)  Chinese Shall of any firms (Archibelog Shall of any firms)  Chinese Shall of any firms (Archibelog Shall of any firms)  Total Address  Total Vision Critics  Replicate Shall of any firms  Repli	411	425	507	-11	531	7.56	7.11	194	173	201	33.4	35.5	222
That of Indicks Post for indicks (Their Their of and Princ) Variety Continent Variety Continent (Schmidt Epinogen in Melinian United Continent Valident Against the Remon (Instituting Disorder) Valident Others  Total Valident Schmidt China Schmidt Disorder Schmidt								-		- "	244	177	- 417
That hors Volcale  That Takes of an French  Vertice Sales Sweete  Command Security of the Sales  Whites Sales Sweete  Whites Against the Record Academic Storedor)  Subsect Against the Record Academic Storedor)  Subsect Subsect Sweete  Total Address  Total Volume College  Society Total  Soci								11000					-
Their Their of and Front)   Vertice Schaffweren   Chimine Training in Vehicles   White Schaffweren   Vehicle	795	1,761	.744 1,460	-5.8	5,90	5.89	1.57	178	176	197	47.5	22.3	74.3
Welfate Selections (Section Section Se	3,409	1,572	2,710	-92.5	22.41	39.34	16.42	729	447	379	24.2	18.5	14.7
Citizend Danings to Melisters  Familia Chine  Uniform Against the Recent Instituting Disorder)  Uniform Cityths (Interview Disorder, Not and Affrey)  Secul Officion  Forth Disorder  Forth Disorder  Roders Ensemen	401	133	118	-4.1	2.30	7.46	7.13	34	78	18.	8.5	8.5	1.0
Makenz Aquint Sta Ferson Lett. Make (Starder) Climarder United Carles (Valvet Discoder, Rock and Affrey) Assaul Offiscon. Total Staffariy Total Vision Corea  Rockers Essenson  Rockers Essenson	1,859	1,165	1398	-4.4	7.74	8.68	8.13	125	163	113	D.F	1.5	21.3
Makenz Aquint Sta Ferson Lett. Make (Starder) Climarder United Carles (Valvet Discoder, Rock and Affrey) Assaul Offiscon. Total Staffariy Total Vision Corea  Rockers Essenson  Rockers Essenson													
Charles (Fulfs, Orter, Violent Discoder, Not and Millian) Install Officeron Turn Auditory Turns		V-5-00-1	A CONTRACT AND	a management	1 2 2 5 1 1 1	See Dec 110	ATTES 151	CHEMINION .	UTITS SECTION OF		er a fallen er er	to account to	
Senior Officeson Tura Robbins Tural Vision Crime	2,317	1,553	1,824	11.7	19,73	39.66	26.99	1,436	1,10	1,274	37.1	17.2	46.7
Total Valency Cross  State Valency Cross  Referent Sections	323	329	210	55.0	124	7.41	1.79	387	47	845	45.4	26.3	87.5
Tutal Vision Crims	313	211	205	52.5	2.81	124	112	195	81	71	12.5	27.8	352
Robinsty Sunimers	1,354	1,315	3,376	11.5	26.57	58.31	18.07	1.687	1,582	1,852	16.5	11.4	11.1
Robinsty European		THE PERSON NAMED IN			110101		17-7-00-			***************************************			
Solvery Essivery		41-7-1	h1			1.	4-1-	0.5	7			1	
	33	- 29	16	40.9	5.25 7.38	0.71	0.12	1/6	10	12.	47.4 71.7	75.7	. 75.8
Robinsy Personal	756	293	754		7.10			90	11:	58		77.9	13.5 13.5
Solid Telf	158	311	198	4.4	1.18	1.35	1.11	10	18	111	6/9	113	9.3
Pag Offices													
: Drug Trafficking -	36	40	30	.22.9	6.40	0.36	0.40	. 50	46.	44	84.2	65.8	. 79.6
Proposition of Controlled Drugs (Electuring Convetted	- 3		137	.000	0.00	0.20	1.42	-		115	65/8	11/6	53.5
Prosenator of Controlled Drugs (Committe)	_	-	400	4.8	0.00	0.30	3.46		-	385	0,4	n'r	71.5
Socially, Assempting Crime.	31	111	141	.65.1	0.66	6.26	LU	- 28	36	I W.	35.8	33.2	33.8
TOTAL ALL CRIME	12,564	21,564	21,646	0.5	100.07	100.00	160,81	6,516	5.246	6,467	28.9	34.4	36.0
the Instead								1					
Darwoods Excellents - Recorded Dress	100	500	2000	75.0	3.34	1.39	8.75						
Cornellic Statisticity - Non Exceptable Conve	593	799	411	37.8	4,42	5.38	4.47						
Hermophobic - Recorded Catore	33	16:	11	31.3	6.16	0.13	8.16						
Horsophobic - Non Recordable Crimii	-3-	- 2	4	29.8	6.02	6.04	9.62	-					
Recipt - Recorded Citive Seater - Non-Recorded Citive	337	41	180	25.7	0.00	6.36	6.33	-					
- Longitude Control Control	-21			- 73	5.75	0.31	7.77	-					
Arron target achieved.		Come target	na sriessori										
and Relation Segata. Rubbery I'm Barglery Deeling I'm V and Sesution Segato: Robbery IIM Surgery Deeling IIM V													
tions April 2002 critics recorded to promise years and so critical in the resolute to the resolute to be the resolute to the control of the c			med from cray	н прити.									
agent FIE & CRUAR P.	nandatain is												

(a) (http://www.thamesvalley.police.uk/news\_info/planning/performance/pf03-04/04-05.htm)

#### Statistics

#### CRIME

### Group 3. Crimes Involving Dishonesty

		04/05 repo	03/04 erted	04/05 det	03/04 tected				
Housebreaking		593	709	271	285				
Theft by opening lockfast pl	aces	477	572	256	212				
Motor vehicle theft		254	257	153	154				
Shoplifting		623	664	514	539				
Other theft		1,774	1,876	652	606				
Fraud and financial crimes		1,174	539	1,097	500				
Other		82	89	80	81				
Totals		4,977	4,706	3,023	2,377				
5419 4775 4411 4342 4776 4777	10/3 906		513 463	Proportion	572 477				
00/01 01/02 02/03 03/04 04/05 Total Group		02/03 03/04 0 sebreaking		01/02 02/03 pening Lockfa					
42.06 44.86 47.12 50.51	35.37 27.15	35.16 40.20	3213	28.96	TA 62 MA. TS				
Percentage detected									

The total number of crimes involving dishonesty rose slightly this year with an increase of 271 (6%) to 4,977. The main increase in this category is fraud up from 457 to 1,067 (133%). Three people accounted for 647 of these crimes.

The overall detection rate improved by 10% to 61% reflecting the positive action taken to target specific crimes and criminals through intelligence led initiatives.

#### (b) <a href="http://www.dumfriesandgalloway.police.uk/foi/class\_cat/ppr/04\_05/stats.pdf">http://www.dumfriesandgalloway.police.uk/foi/class\_cat/ppr/04\_05/stats.pdf</a>

Figure 1. (a) Thames Valley Police crime statistics presented in a performance report format – note they are difficult to read - and (b) an extract taken from the Dumfries and Galloway Constabulary's annual performance report

Essex, Gwent, Merseyside, North Wales, Nottinghamshire, Suffolk police forces currently provide no online presentation of their performance or crime statistics, Durham police and South Wales police provide only links to the Home Office crime statistics site (e.g. <a href="https://www.durham.police.uk/reports/crime\_statistics.php">www.durham.police.uk/reports/crime\_statistics.php</a>) and South Yorkshire provide some general online narrative about their performance (www.southyorks.police.uk/districts/)

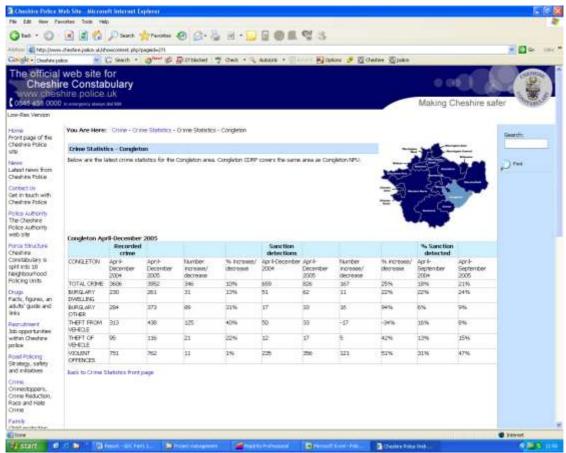
Cumbria Police only present crime statistics in pdf format, but do include good up-todate ward profiles that go someway further than most other police forces in the presentation of their crime statistics

(www.cumbria.police.uk/howwearedoing\_3721.htm)

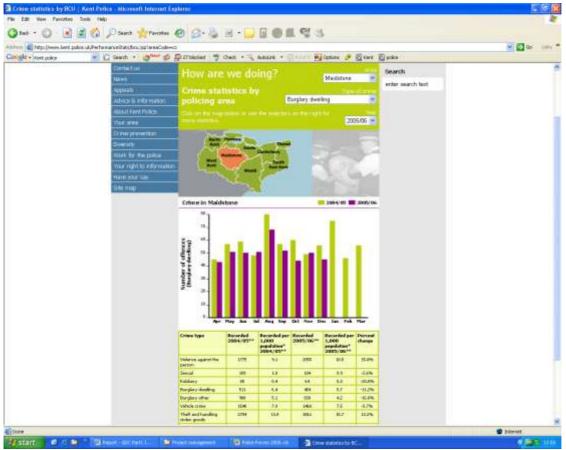
A small number of police forces provide online static web-pages that display their performance and crime statistics, using graphs and tables to display patterns. Figure 2 provides two examples of this approach, taken from Cheshire and Kent. Maps are only used in these examples to help users identify areas of interest rather than displaying crime thematically. Other similar examples include,

- Leicestershire: http://www.leics.police.uk/crimestats/
- Northamptonshire: http://www.northants.police.uk/default.asp?action=article&ID=1662
- Northumbria: http://ww1.northumbria.police.uk/ePolicing/Web/WMS.nsf/acplans
- Surrey: http://www.surrey.police.uk/compol.asp

West Midlands: <a href="http://www.west-midlands.police.uk/operational-command-units/map.asp">http://www.west-midlands.police.uk/operational-command-units/map.asp</a>.



(a) www.cheshire.police.uk/showcontent.php?pageid=269



(b) www.kent.police.uk/PerformanceStats/bcu.jsp?areaCode=cz

Figure 2. (a) Cheshire Police crime statistics and (b) Kent Police crime statistics presented in an online format where the only interaction is by clicking on the map to select the user's area of interest.

The online selection and presentation of crime statistics is improved upon by Avon and Somerset Constabulary where a postcode or street name search helps direct users to their crime statistics of interest

(www.avonandsomerset.police.uk/information/CrimeStats/)

Cambridgeshire Police's approach offers little in the way of crime statistics, and is not that easy to use but does rather surprisingly allow users to identify select and download crime data at the street level (see figure 3)



Figure 3. The online selection, review and downloading of crime data at the street level in Cambridgeshire

# <u>www.cambs.police.uk/camcom/localinfo/crimedetails.asp?Sector=Cambridge%20City%20Centre</u>

Probably the best online resource in terms of the detail of information that is presented is that from West Yorkshire and their <a href="www.beatcrime.info">www.beatcrime.info</a> site. While there is no SVG type interaction between a map, table and graph, the site demonstrates much of the potential in presenting crime statistics online (see figure 4). This includes mapping individual crimes as dots on a neighbourhood scaled background map.

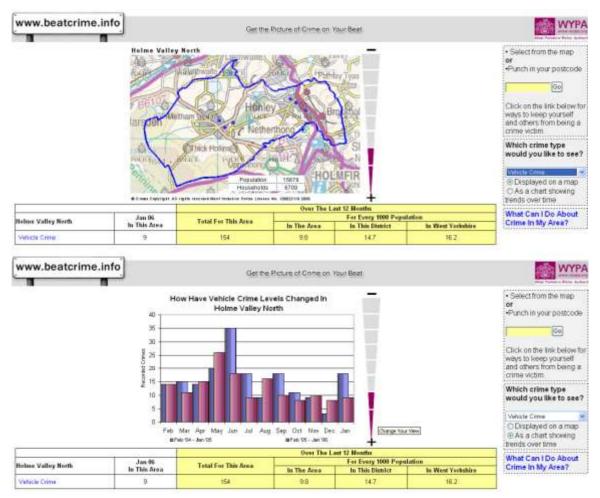


Figure 4. West Yorkshire's <u>www.beatcrime.info</u> site demonstrates some of the potential in the better presentation of crime statistics online.

At present only the Metropolitan Police operate SVG driven crime statistics pages (see figure 5) (<a href="www.met.police.uk/crimefigures/index.php">www.met.police.uk/crimefigures/index.php</a>). However, their use of SVG driven links is only basic (e.g. linking wards on a map to tabular crime statistics) but again demonstrates some of the potential.

This review of the police market shows there are clear commercial opportunities to provide products and services that enhance the manner in which police forces currently present crime statistics. Presenting crime statistics to the public is an increasing requirement that police forces will need to carefully address, and with a few police forces already showing some direction, the opportunity exists on leveraging these to exploit the market potential with these and other forces.

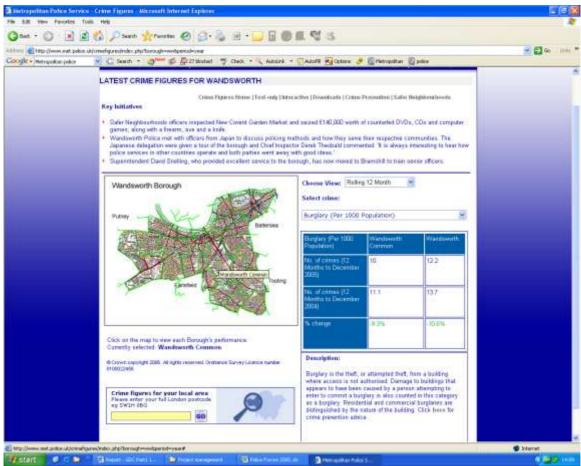


Figure 5. The Metropolitan Police use SVG in their crime statistics pages, but only to a limited degree, and not in a manner that fully harnesses its potential.

#### 3.2. CDRPs

CDRPs are increasingly recognising the requirement to provide local communities with up-to-date information on crime and disorder in their area. This includes details of local crime reduction initiatives, and crime, disorder and anti-social behaviour statistics. Community Safety Teams do not wish to duplicate what their local police partners are doing, but recognise that police forces are only currently providing information in a performance related format and often not at any useful resolution of local interest. They also find that police sites may only inform the public with statistics and miss the opportunity to tell the public (particularly in the high crime neighbourhoods) what they are doing in partnership to tackle these problems.

CADDIE (www.caddie.gov.uk) is a Sussex-wide online partnership information sharing system that includes the functionality for the public to review crime (and other community safety) statistics at the local level. CADDIE is also linked from the Sussex Police web site and acts as a mechanism (albeit not that good) for publishing crime statistics but is reasonably good at informing the public about local crime Similarly, reduction initiatives. **Amethyst** in Devon and Cornwall (www.amethyst.gov.uk) is a CDRP based resource for providing the public with crime statistics and informing the public about local interventions. Until recently Amethyst's online crime statistics pages offered data in a similar format to most online police pages, however they have now developed a powerful interface using the GeoWise Instant Atlas product (see figure 6).

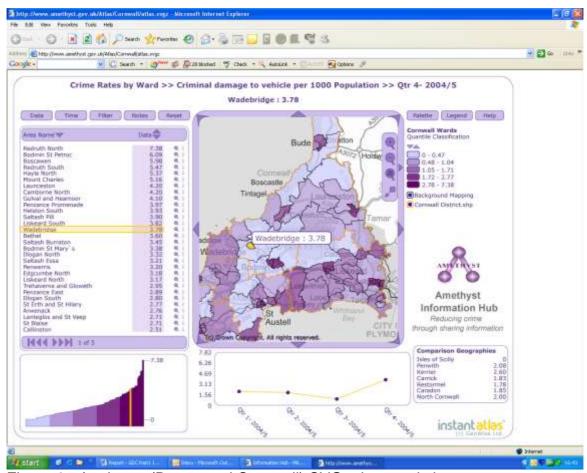


Figure 6. Amtheyst (Devon and Cornwall) SVG crime statistics pages.

The Amethyst site demonstrates much of the potential in SVG driven interfaces for presenting crime statistics, showing how it can provide for a more interesting, dynamic and more rewarding user experience.

Providing crime statistics through this type of interface also helps to meet a number of the core business service requirements of a CDRP – namely performance review and an online scanning requirement. The subsequent report provides more detail about these functions, but based on feedback alone from users in Cornwall's CDRPs, they describe this new approach for looking at data as a 'revolution' that now empowers them so much more than previously in supporting how they go about their work. Response from the police users in Devon and Cornwall has been similar, saying that the functionality of the SVG approach can offer significant potential in supporting their internal operational briefing, tasking and performance review requirements. However, it is not perfect – it is strong in functionality but a subsequent report will identify some of its flaws.

#### 3.3. Central, regional and sub-regional agencies

At present the Home Office provide nothing more than tabular and graphical displays of crime data, presented at the CDRP and/or force level (see figure 7). This dry interface offers little in way of user interaction nor is it a rewarding experience to the

user, but is a heavily promoted and used site for finding crime statistics. Indeed, none of the GORs provide online crime statistics but instead point to this site for all crime statistic enquiries. This site therefore has great potential in being targeted for redevelopment and acting as a showcase for an SVG approach to presenting crime statistics.



Figure 7. Crime statistics presented by the Home Office (http://www.crimestatistics.org.uk/output/page1.asp)

Neither ACPO, NCPE, PITO nor the NCSN provide any online presentation of crime statistics, avoiding any duplication with forces or the Home Office. These are useful bodies to influence but are unlikely to be future customers.

Sub-regional agencies such as Tyne and Wear Research and Information are though beginning to operate a supporting role to CDRPs (via the local Council authorities) to support them in their presentation of crime statistics. This is for both public dissemination of crime and community safety statistics, but also to support local CDRPs in their operational and strategic business service functions. For example, TWRI are another pathfinder site of the GeoWise Instant Atlas product (see figure 8) and are currently going through an exercise of customising its functionality to support the Sunderland CDRP. TWRI also used the more advanced Area Profiler product from GeoWise to enable users to further query data and produce customised reports, although this functionality is still underdeveloped for the CDRP community in Tyne and Wear.

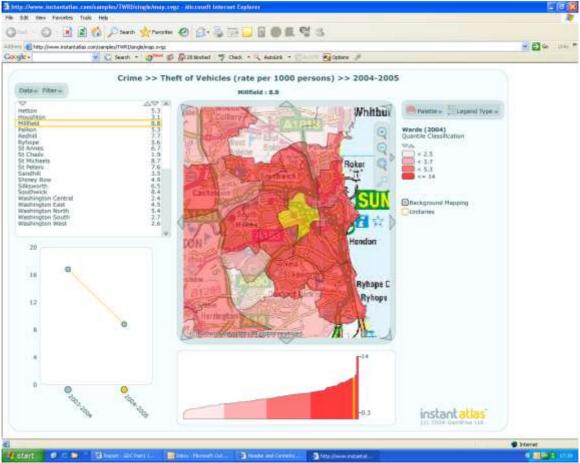


Figure 8. Tyne and Wear Research and Information also use Instant Atlas for presenting crime statistics on behalf of the local CDRPs (<a href="www.tyne-wear-research.gov.uk">www.tyne-wear-research.gov.uk</a>).

While the market for an SVG geo-statistics crime mapping solution for central, regional and sub-regional agencies is smaller, its influence could be significant. Indeed, as the Home Office crime statistics are available for the whole country, these statistics may form the basis of a useful demonstration site to show the potential of <Vendor> products.

## 4. Summary

Three separate markets have been identified as potential users of a web-based interactive geo-statistics crime mapping solution,

- Police forces
- CDRPs
- Central, regional and sub-regional agencies

The Metropolitan Police and West Yorkshire police are by far the more developed forces in presenting crime statistics online, with the Met being the only force that currently utilises some SVG. As police forces are increasingly being required to better present crime statistics, an online SVG solution offers many practical benefits. Indeed the efforts of West Yorkshire and the Met can be used as levers to promote the better presentation of statistics online.

In a short period of time, CDRPs have begun to grasp SVG technology, with Amethyst in Devon and Cornwall leading the way. This example will soon begin to receive some good recognition, helping to further prime the CDRP (and police) market and providing opportunities for competition with GeoWise. TWRI are another Instant Atlas user, but a good example of another market opportunity (sub-regional observatories) that can be targeted. And the Home Office, although may only act as one sale, could be an influential customer that helps demonstrate the utility of a SVG-based interactive geo-statistics solution.

The application of SVG-based interactive geo-statistics solutions is still a very unexploited market. The territory is not virgin territory but is being primed for the increased market demand for this type of tool. As the table below helps to demonstrate, the market is there, the demand is increasing, and with some users already demonstrating its use, now is a good time to develop and take a commercial proposition to market.

Markets	Approximate number of potential customers (England Wales and Scotland)	Users of SVG (February 2006)	Market potential
Police forces	51	1	✓
CDRPs	408	1	✓
Central, regional and sub-regional	40	1	✓

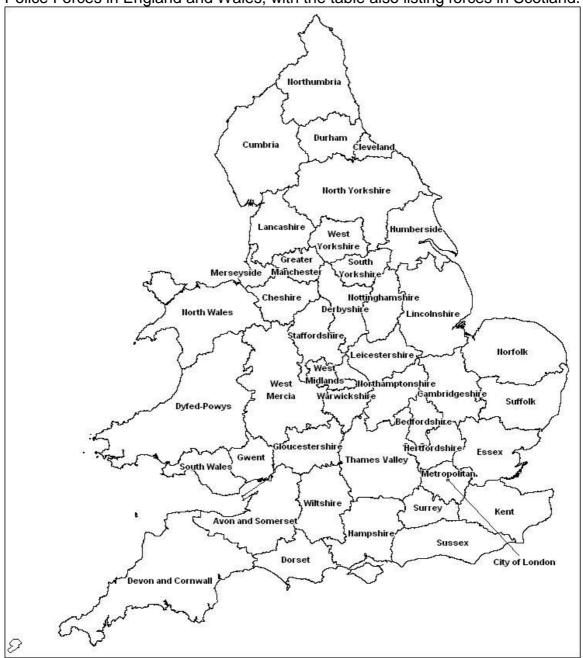
#### Some useful websites

Lists all the CDRPs in England and Wales and GOR Home Office contacts <a href="https://www.crimereduction.gov.uk/regions\_map.htm">www.crimereduction.gov.uk/regions\_map.htm</a>

Lists Scottish Forces and all the Safer Communities Teams in Scotland www.saferscotland.org.uk

# **Appendix**

Police Forces in England and Wales, with the table also listing forces in Scotland.



1	Avon and Somerset	11	Durham	21	Lancashire	31	Nottinghamshire	41	West Midlands	1	Central Scotland
2	Bedfordshire	12	Dyfed-Powys	22	Leicestershire	32	South Wales	42	West Yorkshire	2	Dumfries and Galloway
3	Cambridgeshire	13	Essex	23	Lincolnshire	33	South Yorkshire	43	Wiltshire	3	Fife
4	Cheshire	14	Gloucestershire	24	Merseyside	34	Staffordshire			4	Grampian
5	City of London	15	Greater Manchester	25	Metropolitan	35	Suffolk			5	Lothian and Borders
6	Cleveland	16	Gwent	26	Norfolk	36	Surrey			6	Northern
7	Cumbria	17	Hampshire	27	North Wales	37	Sussex			7	Strathclyde
8	Derbyshire	18	Hertfordshire	28	North Yorkshire	38	Thames Valley			8	Tayside
9	Devon and Cornwall	19	Humberside	29	Northamptonshire	39	Warwickshire				
10	Dorset	20	Kent	30	Northumbria	40	West Mercia				