


CASE STUDY

The Safer Derbyshire Partnership

“MAPINFO CRIME PROFILER IS DEFINITELY HELPING US TO BUILD A SAFER COMMUNITY.”

Clare Usherwood, Partnership Analyst, Safer Derbyshire Research and Information Team



THE SAFER DERBYSHIRE PARTNERSHIP WANTED TO MAP CRIME TYPES AGAINST LOCATIONS, ESTABLISH TRENDS AND USE THE INFORMATION TO DEPLOY RESOURCES MORE EFFECTIVELY.

Challenge

The Safer Derbyshire Partnership, a joint initiative between Derbyshire County Council, Derbyshire Constabulary and local statutory partners, wanted to identify juvenile crime hotspots near three schools in order to deploy resources such as Police Community Support Officers more effectively.

Solution

The Safer Derbyshire team chose Pitney Bowes Business Insight's MapInfo® Crime Profiler, a location intelligence solution that enables law enforcement agencies to map, visualise and analyse crime data. MapInfo Crime Profiler uncovered a number of youth crime hotspots, allowing the Council and Police to make effective decisions about the deployment of resources in schools and on bus routes.

SUMMARY

Derbyshire County Council is a local government authority with responsibility for providing public services to some 750,000 people living in this largely rural East Midlands county. Its responsibilities include working with the county's Police force, Derbyshire Constabulary, to manage and reduce crime and to make Derbyshire a safer place to live.

To help to achieve these aims, the Safer Derbyshire Partnership was established to co-ordinate efforts between the Council, the Police and other local public sector agencies to tackle and reduce crime and anti-social behaviour in line with national targets.

In 2009 the Safer Derbyshire Partnership identified a need to deploy closely-targeted resources to combat youth crime concentrated in and around a number of the region's schools. Residents had complained of juvenile criminal and anti-social behaviour ranging from noise and nuisance to theft and assault.

Calls to the Police coupled with minutes from community meetings suggested that criminal and anti-social behaviour tended to peak at certain times of the day and in certain geographic locations. The Safer Derbyshire Research and Information team (SDRI) wanted to pinpoint these youth crime 'hotspots' in order to support the deployment of Police Community Support Officers (PCSOs), Youth Offending Teams and other resources as effectively as possible.

To map the hotspots, the Safer Derbyshire Partnership selected Pitney Bowes Business Insight's MapInfo® Crime Profiler software, which Partnership Analyst Clare Usherwood had seen demonstrated at 2009's Crime Mapping Conference. MapInfo Crime Profiler is a location intelligence solution that combines multiple discrete data sets to create detailed maps and visualisations of criminal activity, including temporal and spatial hotspots.

Usherwood knew immediately that MapInfo Crime Profiler was the solution that Safer Derbyshire needed. "MapInfo Crime Profiler's capabilities align perfectly to our needs," she said. "Whereas previously we had relied upon Microsoft Excel for data capture and the basic MapInfo package for grid analysis, with MapInfo Crime Profiler we can now map crime types and locations, establish trends and use the information to deploy resources more effectively. It's definitely helping us to build a safer community."

The first step for the SDRI was to load a number of different data sets into MapInfo Crime Profiler in order to correlate the data and produce a detailed map of youth crime hotspots. Data sets ranging from school attendance registers and the Guardian crime database to Derbyshire Constabulary's calls for service records and Anti-Social Behaviour (ASB) intervention register were cleaned and formatted using InfoShare OmniData gazetteer before being loaded into MapInfo Crime Profiler.

“WE COULDN'T HAVE ANALYSED CRIME DATA TO THIS DEGREE WITHOUT MAPINFO CRIME PROFILER. IT WOULD HAVE TAKEN WEEKS IN EXCEL, BUT NOW WE CAN SIMPLY LOAD THE DATASETS AND START PULLING RESULTS STRAIGHT OUT.”

Clare Usherwood, Partnership Analyst, Safer Derbyshire Research and Information Team

RESULT

The SDRI team then added data from the minutes of residents' association and other community group meetings in order to check if the identified hotspots matched up with residents' complaints. Maps of local highways and bus routes were also included, as one of the objectives of the investigation was to reduce juvenile crime by deploying PCSOs on buses at appropriate times of day.

Once the data had been cleaned, formatted and loaded into MapInfo Crime Profiler, the SDRI team were able to start producing visualisations immediately. MapInfo Crime Profiler quickly revealed a number of crime and anti-social behaviour hotspots around individual schools and bus routes and at certain times of the day and night.

Although there was some work to do to fine-tune bandwidths to ensure that individual crimes in low-crime areas did not appear as hotspots, Usherwood says that MapInfo Crime Profiler's ability to produce accurate and detailed maps saved weeks of work. “We couldn't have analysed the data to this degree without it,” she said. “It would have taken weeks in Excel, but with Crime Profiler we can simply load the datasets and start pulling results straight out.”

The hotspot maps produced by MapInfo Crime Profiler are now being used by the Community Safety Reduction Partnerships and Derbyshire Constabulary to decide where and when to deploy resources to tackle crime and liaise with the community. To date five initiatives have been launched as a result of the analysis, ranging from deploying youth workers in local parks to dealing with teenage intoxication, to identifying individuals who could benefit from being included in the county's Street Games programme, a community diversionary scheme that aims to channel young people's energy into sport rather than crime.

In future, the data will also inform a much more closely targeted deployment of PCSOs on buses, as well as enabling youth crime and community liaison services to co-locate more effectively in Derbyshire's schools.

As for Derbyshire's use of MapInfo Crime Profiler, this research project has been just the start. “We're already using MapInfo Crime Profiler to map violent crimes over the past two years to identify emerging trends,” said Usherwood. “MapInfo Crime Profiler is enabling us to conduct more complex, in-depth trend analysis. As a result, we're now able to identify and visualise trends that were previously invisible. We expect MapInfo Crime Profiler to be used extensively to support the valuable work of the Safer Derbyshire Partnership.”

EUROPE/UNITED KINGDOM

Minton Place
Victoria Street
Windsor, Berkshire SL4 1EG

+44.800.840.0001
pbbi.europe@pb.com
www.pbinsight.co.uk

UNITED STATES

One Global View
Troy, NY 12180

1.800.327.8627
pbbi.sales@pb.com
www.pbinsight.com

CANADA

26 Wellington Street East
Suite 500
Toronto, ON M5E 1S2

1.800.268.3282
pbbi.canada.sales@pb.com
www.pbinsight.ca

ASIA-PACIFIC/AUSTRALIA

Level 7, 1 Elizabeth Plaza
North Sydney NSW 2060

+61.2.9437.6255
pbbi.australia@pb.com
pbbi.singapore@pb.com
pbbi.china@pb.com
www.pbinsight.com.au

PITNEY BOWES BUSINESS INSIGHT
IS HEADQUARTERED OUT OF THE
UNITED STATES.



THE PITNEY BOWES BUSINESS INSIGHT ADVANTAGE

Crime analysis and mapping have become essential tools for law enforcement, not only to aid detection rates but also to support operational efficiency and effectiveness, management reporting and other tasks. Pitney Bowes Business Insight's location intelligence-based crime mapping and crime analysis solutions allow local authorities and law enforcement agencies to slice, dice and visualise crime data for real, actionable insight. Visit www.pbinsight.co.uk for more information.