

mapmechanisms



Welcome to the Winter 2002 issue of *MapMechanisms*, the periodical newsletter of Kingswood MapMechanics.



Safety camera identification

The Safety Camera Partnership has chosen Kingswood MapMechanics to provide mapping on the website for their latest scheme to reduce speeding around Somerset. The website www.safecam.org.uk has been launched to provide drivers with the locations of safety cameras and the latest news, aiming to reduce road death and injury in the area.

Avon and Somerset Police, in partnership with local magistrates courts, health authorities, councils and The Highways Agency, selected GeoConcept Internet Server from Kingswood MapMechanics to use with various scales of map data to illustrate the locations of the safety cameras.

With up to 32% of accidents relating to speed, Scott Fulton, Internet Development Manager of Avon and Somerset Constabulary, who developed the site, explains: "The Partnership aims to reduce both collisions and casualties, to inform the public to bring about a change in driver attitude towards speeding and red light running."

Cameras are placed in high-risk accident spots. Fixed cameras, for example, are positioned where there have been at least four crashes involving death or serious injury. Notifying drivers of the cameras in these areas will encourage them to slow down.

As Scott Fulton explains, "What the website is trying to achieve, by being open about the locations of camera sites, is to

encourage drivers to become more aware of their speed, helping to reduce casualties on our roads."

To find out about the safety camera locations, drivers can visit the website (www.safecam.org.uk) and click on the district they would like information on. A list is then presented with a summary of the

number and types of camera in the area (ie fixed, mobile or red light), along with a list of all the individual camera locations. By selecting one of the individual camera locations, a new page is produced, complete with an interactive map at Level 1 scale with the camera plotted in the centre and surrounding cameras are also shown. The map can then be zoomed in and out through the six different scales of mapping, to show different levels of road detail and also give different views of

surrounding cameras.

"We were pleased with the software and its ability to allow us to produce detailed maps which show the camera locations based on information that we fed into the system," Scott Fulton remarked. "We were also able to easily build a web front end to the system from which to call the map data."

Following GeoConcept Internet Server training, Avon and Somerset Police were able to implement the system effectively themselves, as Scott Fulton commented: "The implementation went smoothly, and thanks to some useful preparation and testing we were able to launch

the service quite quickly. ... Kingswood were helpful with their support of the software when it was needed."

The training explained in detail

how to combine the mapping data with GeoConcept Internet Server and how to input and display their own data on the mapping.

The website has had a good response, receiving plenty of media coverage and with over 2000 visitors accessing the site within the first two days of its launch. ■

"The implementation went smoothly, and we were able to launch the service quite quickly. ... Kingswood were helpful with their support"
Scott Fulton, Avon & Somerset Constabulary

DATA UPDATES

AA AutoMaps

Now includes unitaries

The AA AutoMaps raster and vector 1:500,000 and 1:200,000 mapping is now updated. New modern local authority boundaries at county and unitary levels are provided together with the latest changes to the road networks.

Release 35 boundaries

Release 35 postcode boundaries are now available. Census, neighbourhood profiling, business data etc is being re-aggregated to match this latest release so you can easily map all your variables at the latest geography.

Significant changes have taken place in Gloucester and Newcastle Upon Tyne and there are now 9,469 geographic postcode sectors, 2827 districts and 124 areas in the United Kingdom.

NavTech

NavTech street-level mapping Q3-2002 is now available, providing named streets complete with navigational attributes and address ranges.

Unit Postcode Products

Release Q3-2002 is now available for unit postcode products derived from the Royal Mail Postcode Address File (PAF). The full PAF is not only updated, but is also available at a much lower price. At just £900 you can purchase the entire address file with individual property addresses for 27 million delivery points together with fields identifying whether each address is a residential, non-residential or large user delivery point. Use this comprehensive file to plot addresses and find all those within a specified distance of a point or route to generate mailing lists or addresses for leaflet drops.

Automatic updates

If you have not invested in the Kingswood MapMechanics automatic update scheme, please call and we can ensure you are always sent updates as soon as they become available. 020 8568 7000

Interactive journey planner promises to shake up car-sharing market

Web-based interactive mapping lies at the heart of Travelshare, a new product which is seen as making car-sharing a practical, realistic and attractive cost-saving proposition for the first time within major business organisations and public bodies.

Developed by Field Business Solutions of Grantham, Travelshare relies on two key components supplied by Kingswood MapMechanics, real-time interactive map displays delivered by GeoConcept Internet Server, and AA 1:250,000 raster mapping.

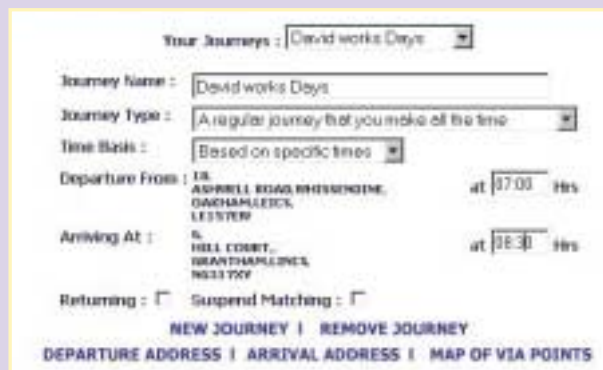
Developed to help organisations save money on parking, reclaim valuable space for revenue-earning activities, whilst also supporting environmentally-sound policies, Travelshare allows individuals within large user groups to enter details of regular or one-off journeys on screen (whether work-related or not), and find other people with matching travel requirements automatically.

“We briefly considered other suppliers, but Kingswood were offering exactly what we wanted, so frankly we didn't need to look any further” David Wilkins, Travelshare

They can then make contact selectively with anyone meeting their criteria, by telephone or email, or communicating directly over a messaging facility built into the Travelshare system.

From an early stage of development, on-screen mapping was considered a key element in Travelshare, David Wilkins says. “People relate to mapping. They can visualise their journey much more easily than with words.”

He adds: “Kingswood MapMechanics were particularly helpful and supportive when we were setting everything up. We briefly



considered other suppliers, but Kingswood were offering exactly what we wanted, so frankly we didn't need to look any further.”

Once a user enters a journey start and end point, GeoConcept Internet Server presents the route on a full-colour map that is automatically scaled to include both points.

When the user presses the command to find matches, the map shows the pickup points for all potential car-sharers on the route, with details of any necessary diversions, drawn from a centrally-

held database of other participants' regular, or one-off journeys that they have entered.

A “hover” facility in GeoConcept pops up brief details of each passenger when the mouse is held over a pickup location. The user can accept or ignore possible matches, and even elect to suppress his or her details from matches offered to other specific participants.

The next version of Travelshare is expected to take the interactive mapping theme further, allowing users to set up their start and end points by clicking on-screen maps, with pan and zoom capabilities for greater control. ■

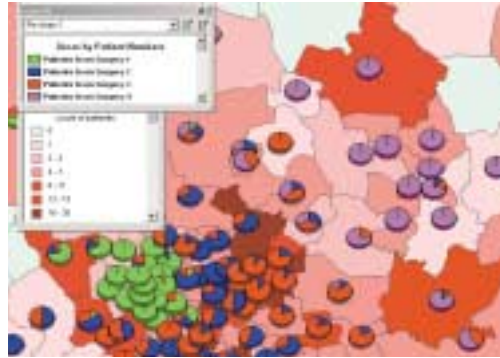
FOCUS ON HEALTH

GIS in Primary Health Care

Malcolm Colledge, Senior Research Fellow, Nuffield Institute for Health, University of Leeds

The Nuffield Institute for Health, University of Leeds, in collaboration with Kingswood MapMechanics has been developing a customised mapping package for use in General Practice and Primary Health Care. Working with two practices in the Yorkshire area we have mapped patient populations to look at patterns of heart disease, diabetes and asthma linked to levels of deprivation and other socio-economic factors, also co-morbidity, i.e. linking heart disease with hypertension and diabetes. Work to date has been presented in a local seminar to practitioners and local managers to gain feedback and look at appropriate data to be included in the GeoConcept GIS and take the development forward.

The package is being developed by using a Critical GIS philosophy involving consumers and community in the research process, allowing us to work closely with doctors and nurses to meet the information management



Similar example map (factual project data remains confidential)

challenges in the new NHS. Our initial aim is to educate practices on the use of information technology and GIS and to assist them to create databases based on local knowledge. Our long-term goal is to establish the use of information technology and GIS in primary health care for clinical governance and needs assessment. Also we are working towards primary care teams participating in health care planning with management using GIS to deliver better patient care. ■

NEW PRODUCTS

Two new products of particular interest to the health sector have now been launched

Modern Primary Care Trust (PCT) and Primary Care Group (PCG) boundaries

These are listed in the 2003 data catalogue. As some trusts are still to be defined by ONS, this dataset is only available with maintenance so that as soon as new information is available, further boundaries can be added to the dataset.

The General Practitioners list

This provides some 40,000 GP records with names or 13,000 GP Locations (11,000 practices and 2,000 branch locations). Although the GMC number that is unique to each clinical practitioner is not yet available, the NHS provider code (that the NHS uses to reference the locations uniquely) can be included. This database is completely re-validated from source every six months.

GeoConcept

European tour
London – UK

This year's series of GeoConcept Tour seminars was launched at Heathrow, London by Kingswood MapMechanics.

Highlights of the seminar included:

- Demonstration of **desktop marketing analysis** including direct linking with external customer databases
- GeoConcept's **SmartLabel** automatically repositioning street names according to the map placement and zoom level
- Cook Hammond & Kell described how GeoConcept had helped them create web-based Cartoplus for Oxford City Council, allowing members of the public to call up **planning maps**
- Isochrones based on the **real travel distance** along each road rather than just drive time based on node-points
- ITIS **real-time traffic flow data** distinguishing between road speeds at different times of day and in different directions
- An update on the wide range of **spatial, demographic and business datasets** available (<http://apps.kingswood.ltd.uk/cat>)
- A demo of the wide range of Web sites using GeoConcept to provide **interactive mapping** (<http://www.mapmechanics.com/getinter.html>)
- Clear examples of GeoConcept **technology embedded** in other products

Fast Compressed Mapping reduces OS Land-Line™ for Great Britain to just 30 GB

This innovative development is at the heart of GeoConcept's ability to handle large and complicated maps using modest computing power. GeoConcept holds map data in an object oriented data structure organised in classes and sub-classes with a hierarchical field structure. A key feature of map display in GeoConcept is the scale sensitive display meaning that objects on the map can be drawn differently when you zoom in and out.

This is important as it lets you display the most useful maps possible. FCM takes a GeoConcept map and compresses the file into a format that has a fast geographical index but preserves the display characteristics; you can still alter the appearance or visibility of objects. These compressed files are held outside the map and referred to by an index point in the map, taking the lid off the amount of data you can hold in a map.

Land-Line for Great Britain comes down

to a manageable 30 GB, a major city like London can be easily held on a Pocket PC with limited data storage.

The maps are compatible with SmartLabel, so you still have all the advantages of good annotation, for example street names that re-position themselves as you move around on the map. A new Web Solution is being developed where the FCM compressed data can be sent over the Internet to a browser with an ActiveX component. ■

Road-network planning, route reports, thumbnail maps in latest TruckStops

Lloyd Fraser is first user of most versatile routing and scheduling system yet

Lloyd Fraser has been using TruckStops for over three years in both strategic and dynamic applications, and completed possibly the quickest-ever implementation last year when it transferred a new customer, Focus DIY, to TruckStops from another system in just two days.

"We've been pleased with the performance of TruckStops ever since we introduced it," says director Simon Ives. "The latest enhancements make it an even more practical and flexible product."

A fundamental change in TruckStops Roads is its ability to base its optimisation process on times and distances calculated from digitised road networks. TruckStops has always used a different system, which breaks journeys down into their main elements (local, long distance and so on), and adds a range of user-definable correction factors to reflect real-life journey times and distances more precisely. Now TruckStops can use either method of calculation, or both methods together in whatever combination suits individual users.

As Lloyd Fraser's Simon Ives puts it: "We're happy with the accuracy of TruckStops as it is, but there are times when it will help us to be able to cross-check the standard results with road-network calculations."

As part of TruckStops Roads, Lloyd Fraser has taken a brand new facility called RouteReporter. This takes delivery schedules produced by TruckStops and automatically generates a line of route report for them, showing times and



distances to each stop. Again, this has appeal both strategically and in day-to-day operations.

Catherine Sharp, central services manager at

Lloyd Fraser, comments: "Customers are reassured when they can be shown exactly how their deliveries are made in real life and the factors that can influence fleet performance."

A further attraction of RouteReporter is that it can generate thumbnail maps

of the environs of each call point, helping drivers find the exact location without having recourse to separate maps or elaborate in-cab navigation devices. Its output is produced in HTML, the standard markup language for Internet browsers, which makes it compatible with a wide range of modern viewing applications, as well as being easy to transmit over the Internet.

According to director Simon Ives, "TruckStops isn't necessarily the best-known modelling tool available but we're very happy with the results we've managed to achieve with it. We know that we have been able to match or beat the outputs from other much more expensive systems, an attribute that fits well with our company ethos. It works for us." ■

"We know that we have been able to match or beat the outputs from other much more expensive systems, an attribute that fits well with our company ethos. It works for us." Simon Ives, Lloyd Fraser

DIARY DATES

KINGSWOOD MAPMECHANICS SEMINARS, TRAINING AND OTHER EVENTS:

SEMINARS

Mapping for Health & Emergency Services

28 Jan 2003, am London

Cartographic seminar

28 Jan 2003, pm London

Making the most of mapping

25th Feb 2003, am Sheffield

Efficient Routing and Scheduling

25th Feb 2003, pm Sheffield

Mapping for Health & Emergency Services

11 March 2003, am Reading

Mapping for Successful Sales & Marketing

11th March 2003, am Reading

EXHIBITIONS

Technology for Marketing

11-12 Feb 2003, London

Softworld Supply Chain

26-27 March 2003, Birmingham

TRAINING

GeoConcept Standard

21-22 January 2003

19-20 Feb 2003

19-20 March 2003

GeoConcept Kits

15 January 2003

13 March 2003

TruckStops

8-9 January 2003

5-6 February 2003

5-6 March 2003

FOR MORE DETAILS call Jo Frisby on 020 8568 7000 email jo@mapmechanics.com, or look at our web site: www.mapmechanics.com

GeoConcept service release

Service Release 3 features improvements to the Oracle connectivity to use 9i and the print banding settings that allow GeoConcept to print large maps on lower spec printers.

Altogether there have been around 300 improvements since version 5 was released. To get the service-release simply download the file on <http://www.mapmechanics.com/gc5.html>

Kingswood MapMechanics expands team

Kingswood MapMechanics is pleased to welcome a new trainer, a software developer, and a logistics specialist. "Our customer base is growing rapidly and the variety of analytical and operational mapping tasks undertaken continues to develop. We are expanding our team with experienced personnel to help our customers get the most from their investment and strengthen our R&D," says Mary Short, MD. ■

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