

## Welcome ...

to this spring edition of forthvalleygisnews.

Inside you will find all the usual features about customer projects, information on the latest data and technology changes and news about FVGIS staff!

We hope you to continue to enjoy the newsletter. Please keep all your feedback coming – we look forward to hearing from you.

## What's inside?

- GeoLink launches
- News:
  - Business
  - Data & Technology
  - Staff & Training
- Going Forth
- Meet the Team!
- Tips & Tricks
- GIS Tutor
- ... and much more

## GEOLINK going live!

**Forth Valley GIS have been working with the partner councils to develop a new GIS intranet site – GeoLink!**

Not only does the site provide on-line mapping but it aims to provide a really valuable resource for all geographic information related matters which affect your business. We have designed the site so that staff in all three councils view the same template, but get access to council specific information. (All data is drawn from a central database (the GeoStore) that holds the definitive version of datasets).

**Available options include:**

### Mapping

All users have access to a basic mapping tool and some common mapping information. By requesting a username and password, you can get access to other data and more advanced functionality to meet your specific business needs.

In the future, more specific applications will also be made available on GeoLink, eg:

- Access to the council's List of Public Roads.
- Access to Local Street Gazetteer.
- Corporate Property Information.



## Training News ...

**FVGIS support officer, David France, has been busy over the last few months and has completed a number of successful training courses.**

GeoLink will soon be available to anyone with access to the Council's Intranet. If anyone would like to attend a short training course for GeoLink then please contact David via [fvsupport@forthvalleygis.gov.uk](mailto:fvsupport@forthvalleygis.gov.uk)



# Meet the team ...



**Simon Hope is the newest member of Forth Valley GIS. Simon joined the team in the New Year and now tells us a little about his life both in and away from Viewforth!**

## Why GIS?

It was an accident! I'd taken GIS courses at University and then picked it up again while working for Scottish Water.

## Career Highlights?

In the hope that I'll score some brownie points I'll say joining Forth Valley GIS! Before I arrived here I'd worked as an analyst/programmer for North Ayrshire Council, and previous to that as a GIS advisor at Scottish Water. Being honest I'm amazed I managed to blag my way this far!

## Tell us about your role at Forth Valley GIS?

I support over 250 GIS users across the three councils, which keeps me on my feet. I am also involved with a number of projects at the moment, including the Customer Support Strategy and an online asbestos register application for Stirling Council Corporate Services.

## Best thing about working for FVGIS?

Being part of a large, dedicated GIS unit.

## Where would we be more likely to find you ... in the pool or in the pub?

The pub, without doubt. As for "other" hobbies, I'm a bit of a vinyl junkie. I have hundreds of records – anything bar rock.

## What was the first record you ever bought?

Err ... Musical Youth – Pass the Dutchie.

## What place do you most want to visit?

Southern India.

## Tell me about this picture?

My stag do! I was dressed as an old lady at Shetlands Up-Helly-Aa festival and managed to get stuck there for a week in the snow without a change of clothes. The locals were not impressed.

## Worst job ever?

Definitely working at a call centre selling phone packages. I could only stick it for two weeks.

## What would you be doing if you weren't at FVGIS?

Either a lion tamer, space man or a circus strong man.

## Favourite film?

Lawrence of Arabia. It's the greatest epic ever and, of course, he was a pre-GIS cartographer.

## Are you doing anything special in April?

As it happens, I'm getting married in Northern Ireland, and then honeymooning in an undisclosed location (my fiancé won't tell me where).

## GIS User Forums

**Forth Valley GIS has been making good progress towards establishing tri-council GIS User Forums.**

These forums will allow users the opportunity to share their experiences and explore possibilities for joint projects.

We are currently collating feedback from Heads of Services across the three Councils and hope to establish the first three user forums between now and the end of May:

- **Planning and Environment**
- **Roads and Transportation**
- **Housing, Property and Estates**

and future forums for:

- **Policy, Community Planning and Economic Development**
- **Social Work and Education.**

The User Forum Framework paper is posted on the FVGIS Intranet site – GeoLink. Minutes and presentations from each of the forums will also be posted there as they become available.

## Staff News

Congratulations to **Wendy**

**MacDougall** who will be leaving the unit to take up the position of PA to Keith Yates, Stirling Council's Chief Executive. Wendy – thanks for all your efforts over the last 3 years – you'll be greatly missed!

... and finally congratulations to

**Simon Hope** (see this edition's 'Meet the Team') on recently tying the knot with Mo. Simon is currently on honeymoon in an undisclosed location!

## INTERNAL

### Great progress has been made across all of our key Development Projects.

By the time you read this, the first phase (access to external data) of the new Intranet GIS site - **GeoLink** will be rolling out across the partner councils!

Many thanks to all of our users involved in testing this site!

Some of our recent achievements:

- The **live** database for the Spatial Data Warehouse (the GeoStore) has been successfully established. This now contains all **external** data sets (third party data such as Ordnance Survey mapping) and approximately 160 key internal datasets (data produced by the council).
- Ordnance Survey Master Map is available in the GeoStore under full change only monthly update.
- After consultation with our users, options to move from ArcView 3 products to alternative GIS solutions have been investigated and documented in the GIS Software Migration plan.
- GIS User Forums are being set-up across the partner Councils (check the intranet for more information as it becomes available!)

- Work has started on a new customer support strategy. A GIS Support position statement has been compiled and is now available on the FVGIS website.
- The Corporate Address Gazetteers are reaching the end of their creation phase - ready for the hard bit - implementation and maintenance!

## EXTERNAL

### Forth Valley GIS Consultancy Services continue to be busy:

- Angus Council has extended their contract with FVGIS for a further two years. We are currently working with them to develop a corporate GIS database and intranet GIS solution using Oracle and Autodesk Mapguide.
- Work has just started with East Lothian Council on identifying, analysing and re-defining address management business processes, to inform implementation of their Corporate Address Gazetteer.
- We continue to work closely with Scottish Enterprise, recently assisting the migration of their national digital mapping coverage to a SQL Server/ArcSDE database. This database now links to Kmap - the Scottish Enterprise knowledge management portal. We have also been providing analysis of geographic coverage and availability for the Kmap Broadband application which is being used to inform market intervention.



## Web Watch: Route Planners

### Route Planners are a great example of GIS on the web.

Examples include:

- [www.rac.co.uk/routeplanner](http://www.rac.co.uk/routeplanner)
- [www.theaa.co.uk](http://www.theaa.co.uk)
- [www.multimap.com](http://www.multimap.com)
- [www.greenflag.co.uk/routeplanning/index.asp](http://www.greenflag.co.uk/routeplanning/index.asp)

Starting point, destination, and stop-off points can be entered with varying degrees of accuracy (ie entering Falkirk would only provide directions to the town centre, but if you wanted to know the best way from home to your grannies house in Oban then you could receive door-to-door instructions)!

Routes are calculated using road network datasets. Detailed driving directions are provided which include road names and numbers, junctions, exits, distances and travel times.

Maps are generally interactive and allow the user to view the whole journey, or just a particular stretch. Even information such as motorway services and traffic information can be viewed to make as realistic an assessment of your journey as possible!

Some sites even extend to cover Europe!

## Welcome

### We would like to welcome Jonathan Stewart to the team at Forth Valley GIS.

Jonathan will be joining us from Parsons in London where he has been working on a number of interesting projects for the US Army Europe (USAREUR). He will be taking up the post of Senior GIS Analyst on 4 May and brings with him a vast amount of experience in areas such as field GIS and remote sensing technology.



# Going FORTH ...

## Local Plan for Local People ...

Every 5 years, all councils are required to produce a Local Plan in order to identify the proposed land development sites for the coming years. At Clackmannanshire Council, the Development Planning team produce a comprehensive document which includes:

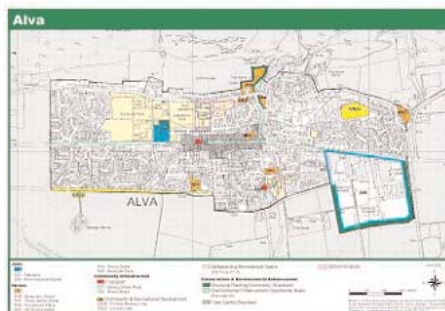
- 1 Settlement Plans:** each town in Clackmannanshire has its own plan showing housing, business and areas protected against development.
- 2 Countryside Plan:** proposed developments and all environmental constraints in non-urban areas. These restrictions include green belts, tree preservation orders, archaeological sites, etc.
- 3 Conservation Areas:** restrictions on developments in protected urban areas, such as presence of listed buildings and tree preservation orders.

Robert Duff, Technical Officer from Clackmannanshire Council says that GIS is now considered a vital tool for the production of clear, comprehensive maps presented in the Local Plan. Robert remembers:

"When I first joined the Council only 10 years ago, mapping was created and updated using manual drawing of film negatives, which were then photocopied. Maps would often overlap several sheets, making new plans very awkward to achieve".

With the aid of GIS, maps are now seamless, regularly updated and offer the potential to be integrated with all manner of other geographical information. Whilst the Local Plan is still the main priority, Robert uses Arc 8, Arcview 3 and Forth Valley GIS's Desktop Mapping System to respond to many advanced mapping requirements in areas such as:

- Sustainable development
- Development Quality Control
- Emergency Planning
- Countryside Rangers
- Waste management



## Waste not want not: Stirling uses GIS in refuse re-routing

Stirling Council has put GIS to good use in this spring's mammoth refuse re-routing exercise. Waste Services staff are busy designing collection routes using Forth Valley GIS' Refuse Routing Tool.

David Hopper, Stirling's Waste Services Manager says:

"GIS has made routing design so much easier. The Routing Tool gives us the flexibility to balance collection areas based on location, number of properties, and street layout. The Tool has also allowed us to provide crews with customized maps that show pickup points and special pullout locations."



Refuse routes are being redesigned throughout the council area, starting with domestic routes in the urban areas and followed by commercial and rural areas. The refuse tool is the first example at Stirling Council of Corporate Address Gazetteer (CAG) being integrated with GIS applications. This means that the property list in the routing tool will always be up to date. Routes can be readily revised in response to both property development and demolition so that optimum operation efficiency can be maintained.



## Minimising the risk in Falkirk

**Falkirk Council has chosen GroundView from AEA technology as the tool to manage and analyse their contaminated land data. Alison Mackay, Falkirk Council's Contaminated Land Specialist evaluated many of the existing solutions on the market.**

Alison says:

"Groundview will assist with both managing and evaluating a vast amount of disparate information on a site by site basis. This information includes site investigation analyses and reports, planning, legal and enquiries' correspondence and GIS maps and datasets."

GroundView is based upon a database linking to ESRI's ArcGIS 8 software. Site prioritisation tools are available as well as standard GIS functionality for viewing and analysing layers of information. Alison is currently busy assembling the large number of datasets required by GroundView to assess the relationships between 'Sources', 'Pathways' and 'Receptors'.

Falkirk Council hope to use GroundView to meet statutory requirements relating to Contaminated Lands Regulations whilst achieving the Council's aims of transparency and best value.

# Data News & Technology Update



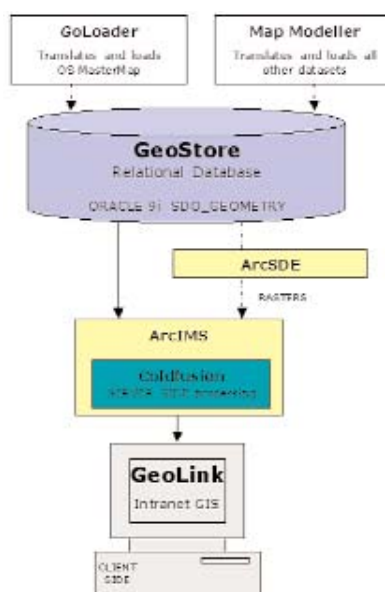
Fiona Thomas, Forth Valley GIS Data Co-ordinator brings you all the latest information ...

The new intranet GIS facility is currently rolling out across the councils. Craig Walker, Forth Valley GIS technology co-ordinator, explains some of what has been going on behind the scenes:

**GeoLink** is the new web browser based GIS application. The site has been built using Macromedia's ColdFusion, with ESRI's ArcIMS supplying the mapping functionality. All the data is drawn from a centralised Oracle database repository, the **GeoStore**. This database is populated using a combination of Snowflake's GoLoader (for OS MasterMap) and CadCorp's MapModeller.

Oracle 9i uses the Spatial Data Option (SDO) Geometry format. This storage method adds a layer of flexibility to the model allowing the possible introduction of other GIS technologies, such as AutoCAD and MapGuide etc. ArcIMS can draw data directly from SDO\_GEOMETRY whilst ArcSDE is required to store and deliver raster data via the database.

This model is radically different from what was in place before. It is likely that file-based delivery of GIS data will become less commonplace as organisations realise the potential of Spatial Database technology.



## Mapping Service Agreement

During the last 12 months, the Local Government Information House (LGIH) has been making arrangements to procure mapping services on behalf of Local Government organisations.

The Ordnance Survey SLA was due for renewal on 31 March 2004. A new Mapping Service Agreement (MSA) will now replace this. The MSA was open to competitive tendering, and as a result, not all products contained within it are supplied by a single supplier. As the contract for the new MSA has not yet been finalised, Ordnance Survey have formally agreed to a 2-month extension to ensure that authorities are not in breach of copyright. More information will become available as the detail is communicated to authorities from LGIH.

If you have any queries on this subject then please contact Fiona Thomas (GIS data co-ordinator) on 01786 442632.

## External Data ...

All 3rd party datasets (such as those from Scottish Natural Heritage, SEPA, Ordnance Survey, etc) have now been transferred into the GeoStore. OS Mastermap topography layer is being managed on a monthly Change Only Update for the three partner Councils.

As well as ensuring that the most up-to-date data is always available, the GeoStore will also archive earlier versions of data for a full historical picture. Over the next few months we will be concentrating on internally generated datasets and the compilation of metadata.

### 3rd Party Data Management Plan

We have now completed the Forth Valley GIS 3rd party Data Management Plan. The plan is based on:

- results of a partner Council GIS 3rd party data questionnaire.
- general feedback from customers and FVGIS Staff.
- an internal review of Forth Valley GIS current 3rd party data management practices.

The new data management plan considers new strategies to assist modernising government service delivery and the continual improvement of GI service delivery to our partner Councils.

## Data Updates ...

As well as all of the exciting new initiatives featured in **data news**, it has been business as usual with making sure that the GIS data is up to date. The following 3rd party datasets were updated across the councils in April 2004:

- **Ordnance Survey:**  
Address Point (full re-supply)  
Land-Line (updates only)
- **Scottish Natural Heritage:**  
All standard key datasets - RAMSAR, SSSI, NSA, ESA, ETC - full re-supply)
- **Landmark Information Group (Falkirk Only):**  
Historical Mapping (post-war)  
Point X  
Historic Tanks and Energy Facilities



# Other News ...

## Are you visiting the Loch Lomond and Trossachs National Park this Summer?

Loch Lomond and Trossachs National Park came into operation in 2002 - Scotland's first National Park!

Keen to be able to assess visitor management options, the National Park authority has recently engaged a team from the University of Stirling to research visitor movements and destinations within the Park. The first phase of the study has been an audit of all existing geographic data relating to main tourist routes and visitor activity locations. In addition, some primary research has been undertaken. Forth Valley GIS have assisted with the collation of map-based questionnaires to assess the main routes and stopping points of recent visitors to the Park (see map). By combining these maps with tourism-related variables, the team aim to be able to identify potential sites and areas as **tourism resources**.



This **spatial** approach will provide valuable baseline data which can be used to inform policy making. The results will inform the strategic direction of tourism planning, visitor management policy and capital works programmes as part of the National Park Plan. Gordon Watson, Director of Planning, says:

"The response to our map based postal survey of visitors has been excellent and the mapping of their routes and stopping points has provided a fascinating picture of how visitors are currently using the Park. This information will help us decide which locations in the Park should be prioritised for visitor infrastructure projects such as improved car parks and information points."

## GIS Tutor ...

Most people are generally pretty comfortable with the idea of scale in relation to a paper map – a map scale of 1:100 means that 1 unit on a map is used to represent 100 units on the ground. On such a map, a 15 metre long wall would be represented by a 15 cm line.



### Simple isn't it?

Confusion creeps in when we use computer screens (and GIS) to view our map data – whilst maps can be set up to print at a chosen scale, we can now also zoom in and out of our maps which means that the scale at which we view the data on our screens is constantly changing.

In fact, when we talk about scale in relation to digital data, we often mean something slightly different ...

In theory, using a GIS would allow you to view your data at any scale. In reality, the data will only make sense between certain ranges of magnification. Have you ever tried zooming right in to a map only to find that the data appears blurred and blocky? Or zoomed right out ... only to have a frustrating wait to return an overly detailed 'clutter' of information? This is because the limits within which the data actually makes useful sense depend upon the scale at which the data was captured at – the **source scale**.

Large-scale data (eg 1:250) is the very detailed mapping that allows us to examine things locally – for example, the locations of tennis courts, boating lakes and sheds within a town park. If, however, we were interested in an overview of parkland within our local authority then we would probably use a small-scale product (eg 1:50,000) which **generalises** this detail to a simple park outline.

Only data captured at similar scales should be used together in a GIS – otherwise things can start to go wrong! This picture highlights the possible difficulties.

Here, large scale business data is shown against a coastline dataset which covers the whole of Europe. The Post Office hasn't really fallen into the sea ... it is simply that the coastline dataset is being used at a larger scale than ever intended.



The new **Geo-web** uses 'scale-thresholds' to ensure that background mapping is only viewed at appropriate scales. As you zoom into an area you will see that the map product changes according to the amount of detail required.



# Back Bit ...

## Diary Dates

### 22 September

Think GIS for Local Government  
ESRI Location 2004 Event  
Manchester

### 28 September

Think GIS for Public Sector  
ESRI Location 2004 Event  
Edinburgh

### 18-20 October

AGI 04  
Networks, Networks, Networks  
Chelsea Village, London

### 1 December

AGI Scotland Annual Seminar

## Funny?



**Q** Why didn't the map have any meridians?

**A** It was a map of a parallel universe.

**Q** Why can fish measure distances so well?

**A** Because they have their own scales.

## For further information please contact:

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Web [www.forthvalleygis.gov.uk](http://www.forthvalleygis.gov.uk)

## Tips and Tricks

Being able to create a point dataset from a table is a very useful technique and is quick and easy to do in both ArcView 3 and ArcView 8. The table you work with must have fields that represent X and Y coordinates. This is often called creating an 'Event' theme or layer.



### In ArcView 8:

- 1 Add your table to the map.
- 2 Choose the 'add X/Y data ...' option from the tools menu.
- 3 Choose the table you added in step 1.
- 4 Specify which fields hold the X and Y co-ordinates.
- 5 Define which spatial reference system you wish to use ie British National Grid.
- 6 Then select OK.

### In ArcView 3:

- 1 Add your table to the project and open a view.
- 2 Choose 'Add Event Theme ...' under the view menu.
- 3 Select the table you added in step 1.
- 4 Specify which fields hold the X and Y co-ordinates.
- 5 Then select OK.

In both cases, the GIS will then do the hard bit and create a point on the map for every X/Y coordinate pair in your table. **Remember:** if you would like to keep and re-use this data then remember to save the dataset or shapefile! If you think the dataset may be of interest to a wider audience then contact the FVGIS Data Co-ordinator who can make it available through the GeoStore.



find the haggis and win a prize



forthvalleygis  
GEOLINK

**GEOLINK** going Live...

### The Council's brand new Intranet GIS!

being launched over the coming weeks - to be available from your Councils intranet homepage

Join in the fun (and win £50 of Shopping Vouchers!) by taking part in an exciting **Treasure Hunt competition...**

### Want to find out more?

Have **A Go** at **GIS** on the Geolink homepage...

find the  and win a **prize!**

Use Geolink to **browse** a wealth of geographic information for your council area... some of which you may have not even known existed!

Closing date 15 June 2004