

**NORTHERN IRELAND
GEOGRAPHIC INFORMATION
STRATEGY 2009-2019
“EFFECTIVELY USING
INFORMATION ON LOCATION”
ANNUAL REPORT 2010-2011**



GI for NI

Geographic Information Strategy for Northern Ireland

Improvement of farm mapping in Northern Ireland.



Figure 1: The image above shows the capture of ineligible area polygons according to the DARD mapping protocol. This data capture exercise is being carried out as part of the LPIIS Improvement Project, an Invest To Save project between LPS and DARD aiming to improve the quality of the DARD mapping system used to administer the EU Single Farm Payment scheme in Northern Ireland.

Foreword



I am pleased to be able to report on a year of significant progress in the use of geographic information—information about place—in improving the delivery of public services and therefore the lives of people in Northern Ireland. This report provides information on some key achievements in the last year, as well as setting out our plans for building on this success in 2011–12.

On a global scale, the importance of the answer to the question ‘where’ is being increasingly understood. More and more, policy makers and political leaders are talking of Spatially Enabled Societies, where place is a vital component of decision making. In this era, therefore, those who hold data and have expertise in using it have a duty to provide advice on how best it can be used to meet the needs of the economy and the citizen. Northern Ireland continues to be at the forefront of this work, thanks to many individuals and teams across the public and private sectors.

At a European level, 2010 was a significant year for geographic information as the first major milestone of the EU Infrastructure for Spatial Information in Europe (INSPIRE) Directive was reached: all Member States were required to have metadata created in INSPIRE compliant format for key (Annex I and II) datasets by December 2010. This metadata will allow users to understand what data already exists, and therefore to avoid duplication of effort. 2011 and 2012 will see the development of internet services to view and access key datasets, therefore allowing them to be combined effectively to answer questions and solve problems.

Within the UK, the Location Programme has also made progress over the last year. DEFRA, the Cabinet Office and Ordnance Survey® are working together to deliver the necessary tools to share location information via **data.gov.uk**. Northern Ireland will look with interest to see the development of a new Public Data Corporation in England, as announced by the Government. The anticipated outcomes are that the Corporation will drive efficiencies and open up opportunities for innovative developers, businesses and members of the public to drive social and economic growth through the use of data. In parallel, many parts of the Northern Ireland public services continue to use a variety of tools to join their data holdings.

In Northern Ireland, the Permanent Secretaries Group (PSG) approved the implementation and funding of a new Northern Ireland Mapping Agreement (NIMA) 2011, which came into effect to 1st April 2011 and will last until March 2015. The introduction of NIMA in 2007 has been recognised as a very significant factor in the development of Geographic Information (GI) usage throughout the Northern Ireland Civil Service (NICS), and this new agreement will allow this to continue. The Agreement provides access, free at the point of use, to all public servants to a wide range of geographic information.

The last year also saw the culmination of years of planning by the Northern Ireland Statistics & Research Agency (NISRA) which resulted in the first ever census in NI for which the forms were distributed by mail. The collation of a new set of socio-economic data for NI will shed new light for the future provision of services, placing them where they are needed. The ability to deliver the census forms by post resulted from significant work by NISRA, Land & Property Services, District Councils and others to improve and refine Pointer®, the definitive address dataset for Northern Ireland.

Over the next year, data from the census will become available. Linked with other geographic information, it will provide an extremely rich backdrop for decisions across government. In parallel, the purchase of a new digital aerial camera with infrared capability by Land & Property Services will provide fresh insights into land use and many other fields.

Establishing a new strategy often takes time and I believe that in the first full year of implementation we have made significant strides in embedding the 2009–19 Geographic Information Strategy. Lack of resources to implement the strategy in the current economic climate is still a very real risk; however, by highlighting the cost savings and service improvements that using GI can bring should ensure an ongoing successful strategy implementation. This will ultimately lead to a Northern Ireland that has a better developed economy, environment and society all stemming from better use of geographic information.

A handwritten signature in black ink that reads "Iain Greenway". The signature is written in a cursive, flowing style.

Iain Greenway

Chief Survey Officer

May 2011

Executive summary



In the first year of implementation, the strategy has taken its first steps towards achieving its objectives. Significant external developments such as the first INSPIRE Directive milestone of creating metadata, the creation of a technical infrastructure

for the UK Location Programme and the agreement of a new Northern Ireland Mapping Agreement have also all taken place in the last year.

This annual report details the progress that the strategy has made in its first full year of implementation. Examples in the report illustrate that the first year of implementing the strategy has shown the potential for savings to be made. The examples show what can be achieved in all organisations, large or small, often without significant investment or specialist skills.

The last year also saw the introduction of GI into various organisations such as the NI Assembly, the Probation Board NI and the Public Health Agency. Other organisations such as the Department of Agriculture and Rural Development (where GI is well established) have diversified into applying GI in new areas such as animal disease management. The last year has also seen a steady increase in the use of GeoHub NI[®], Northern Ireland's data sharing web portal. It currently holds over 250 layers of information and in March 2011 had over 2,400 unique logins for the month.

Work has also progressed on assessing and developing the necessary GI skill levels in Northern Ireland. Initial work has concentrated on defining the scope of the profession and gathering information on the current size and shape of the GI staff within the Northern Ireland Civil Service.

Communication and engagement with wider stakeholders has developed through the creation of a website for the strategy (www.gistrategyni.gov.uk). The website has a regularly updated news section for articles of interest along with a section on the strategy and its work and information on INSPIRE.

Regarding governance, the Delivery Board is now well established to implement the strategy and has increased representation in new areas such as the new Department of Justice. We are also considering how other platforms such as conferences can allow us to explain and support the use of geographic information more effectively.

Looking forward to the implementation plan for 2011-12, the Delivery Board has decided to focus on a small number of strategic strands of work. Ongoing work such as the GI work in the Assembly and embedding GI in Primary and Post Primary schools will continue as operational strands. The strategic strands being taken forward are: driving the use of the definitive address dataset for Northern Ireland (Pointer[®]); meeting our legal obligations under the INSPIRE Directive and, by doing so, making geographic information still more accessible; providing an increased spatial dimension to the NI Direct service (both telephone and websites); and further developing GI skills.

The current difficult economic climate provides an opportune time to promote the savings that the use of GI can bring. The challenge to the Delivery Board and all stakeholders in Northern Ireland is to build the awareness and knowledge among the policy and decision makers and so drive GI uptake to improve lives in Northern Ireland.

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Geographic information systems can now generate river catchments using high quality Digital Terrain Models. The DTMs provide greater accuracy and authenticity.

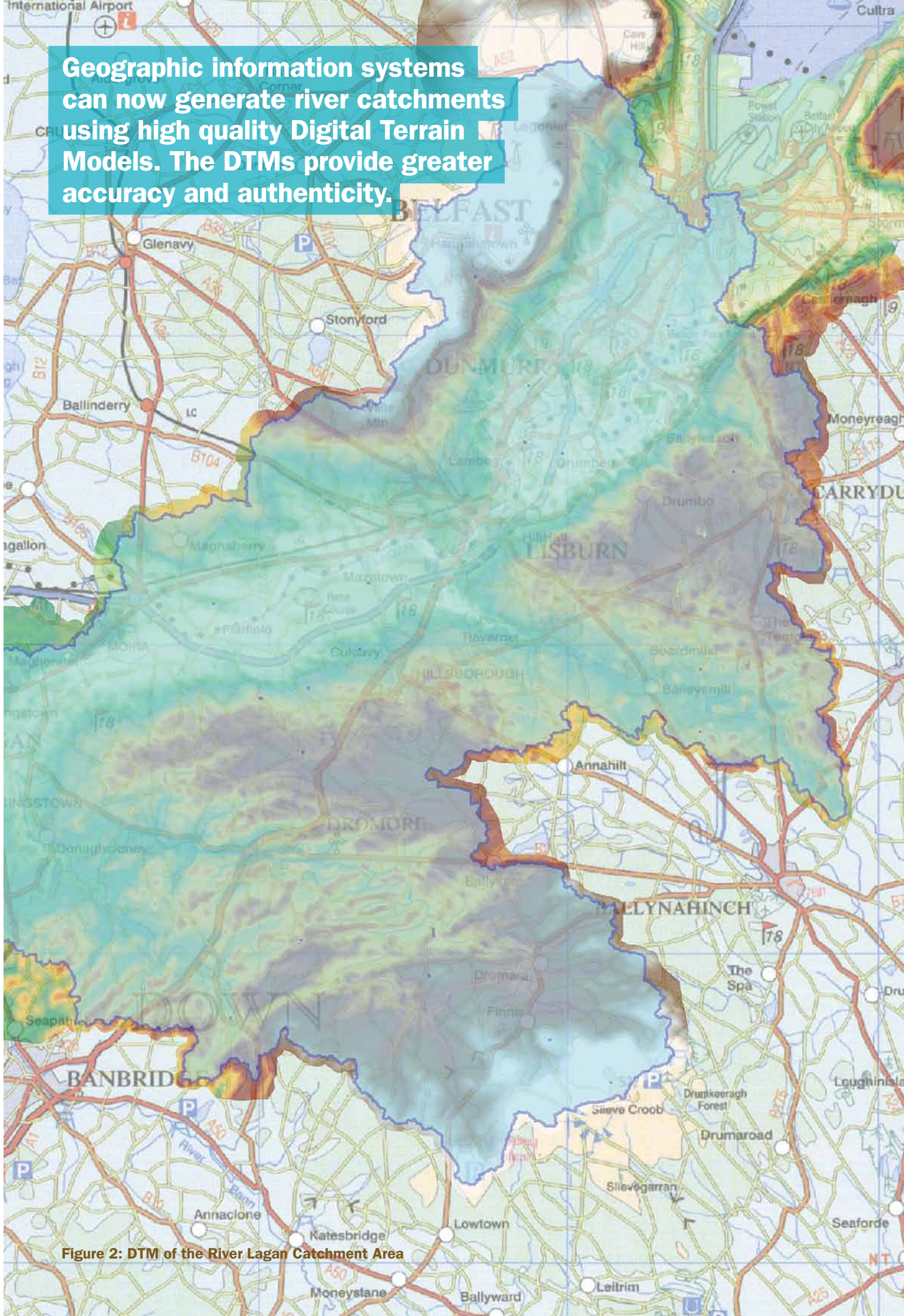


Figure 2: DTM of the River Lagan Catchment Area

Introduction

The Department of Finance and Personnel (DFP), through Land & Property Services (LPS), coordinated the development of the Geographic Information Strategy for Northern Ireland 2009–2019. This Strategy builds on the strengths of the 2003 strategy which was the first of its kind in the British Isles. Stakeholders, predominantly from NI but also from Great Britain, Ireland and Europe, helped shape the new strategy whose vision is:

“We will improve services and thereby develop the economy, the environment, and the society of Northern Ireland by placing information about location at everyone’s fingertips and supporting the development of sufficient skills and knowledge to exploit this information.”

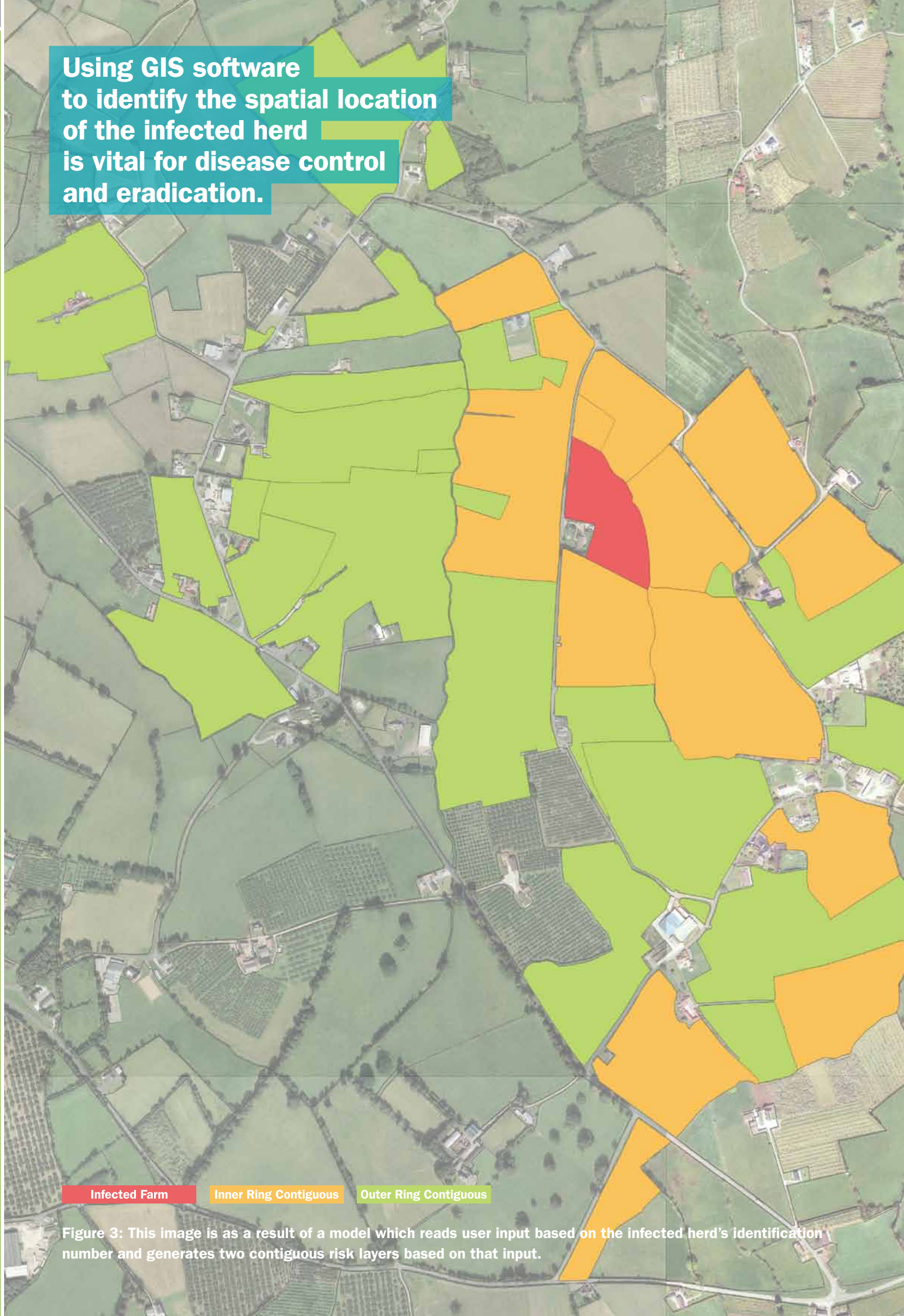
The objectives of the strategy are:

- To improve the lives of Northern Ireland citizens through the sharing of geographic information to facilitate more effective decision making.
- To educate and improve everyone’s understanding of the power of geographic information and promote its benefits.
- To control the costs of data management by co-ordinating the creation and maintenance of data sets and eliminating duplication in existing datasets.
- To utilise core geographies as common reference data to improve data utilisation and sharing.
- To ensure that systems, standards and business relationships are in place so that the right geographic information is easily accessible in all of the right places and in a timely way.
- To increase skill levels so that everyone who needs to use geographic information knows what they need to accomplish this effectively.
- To conform with emerging national and European legislative requirements relating to geographic information.
- To create strong leadership and governance to implement the strategy and embed its recommendations so as to improve the economy, the environment and the society of Northern Ireland.

The eight work streams taken forward in the last year were:

1. To embed GI into policy, project and programme management;
2. Incorporating GI into the NI Assembly;
3. Embedding GI into strands of the Strategic Investment Programme;
4. Embedding GI into the curriculum at Primary and Post Primary levels;
5. Developing NI GI Skills;
6. Data sharing—GeoHub NI;
7. Outreach to entrepreneurs;
8. Data harmonisation.

Using GIS software to identify the spatial location of the infected herd is vital for disease control and eradication.



Infected Farm

Inner Ring Contiguous

Outer Ring Contiguous

Figure 3: This image is as a result of a model which reads user input based on the infected herd's identification number and generates two contiguous risk layers based on that input.

Benefit analysis: How the strategy has made a difference

Effective use of geographic information can bring many types of benefits. The next section of this report considers the following benefits:

- **Financial savings;**
- **Increased knowledge and understanding;**
- **Increased skills;**
- **Increased use;**
- **Better service locations; and**
- **Data access, sharing and standards.**

The material covers the period of March 2010 to March 2011.

2.1 Financial savings

In marketing activity



The South Eastern Regional College (SERC) has harnessed the power of GI to drive financial savings in its marketing department. Staff utilised GI to analyse a range of information such as population, age structure and addresses of existing students to create targeted marketing campaigns. This method ensures that information is sent only to areas which appear to be fruitful in terms of enrolment for courses. Initial estimates are that SERC has saved around £65,000 on printing and postage costs. Staff have also used GI analysis to highlight particular issues such as dropout rates and analysing these against deprivation measures. SERC, which is made up of eight campuses and has a total of 31,000 students, has also utilised GI to identify students and their studies to determine which campuses should run which courses.

In tackling illegal dumping



Savings of £30,000 have been made by the Northern Ireland Environment Agency (NIEA) Environmental Crime Section by using GI for the identification and return of illegally dumped waste from two sites in Northern Ireland back to the Republic of Ireland. With the potential of 13 more sites these savings are set to rise considerably. Historical aerial photography was used to identify the sites and then accurately determine their extent.

In river catchment and flow modelling

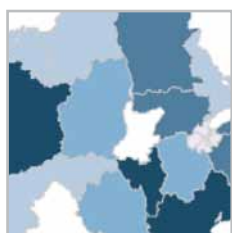


Northern Ireland Rivers Agency has demonstrated considerable financial savings in the generation of river catchment areas over the last year. Historically, river catchment and flow modelling has been carried out by using paper maps and in some cases carrying out site visits to confirm the situation on the ground. Although these methodologies have proved to be suitable in the past, geographic information systems can now generate river catchments using high quality Digital Terrain Models (DTMs). The DTMs provide greater accuracy and authenticity as current practices are very repetitive and prone to human error, particularly when measuring areas and interpreting scales.

Approximately 800 planning applications a year need river catchments developed; each one takes around one and a half hours of manual work for a professional staff member. The ability to have a 'point and click' tool on the system viewer where the relevant information on catchments and flows can be generated immediately provides major time and thus significant monetary savings.

2.2 Increased knowledge and understanding

In the Northern Ireland Assembly



The Northern Ireland Assembly has introduced the use of geographic information to its Research and Library Services. Part of the initial work was in creating easier access to GI through the development of an interactive mapping intranet site holding data about election results and constituency profiles. This in turn has facilitated an improved understanding of local area dynamics for local politicians, with local constituency offices now regularly requesting new constituency maps. Better decision making in the Assembly has been assisted by the inclusion of maps derived from GI analysis in reports as diverse as deprivation analysis and the cost of car and home insurance reports.

Gareth McGrath, Director of Engagement in the NI Assembly, commented:

“I am very pleased with how GI has helped the Assembly. It has proven to be a useful tool for presenting data in a visual format.”

Among civil servants at all grades



Following a GI presentation to the Permanent Secretaries Group (PSG), all Permanent Secretaries have sought to highlight how GI could be used in their Departments and to promote its potential. This led to the making of presentations to Senior Civil Servant groups within all Northern Ireland departments.

The talks have supported the following achievements:

- The unanimous endorsement of the new Northern Ireland Mapping Agreement (NIMA) 2011 at Permanent Secretaries Group;
- GI Strategies are being written for the Department of Regional Development and the Northern Ireland Environment Agency;
- Increased uptake and use of GeoHub NI; and
- A range of test projects were carried out for several Departments, illustrating the power of GI to them.

The GI consultancy unit in LPS estimates that it has given GI presentations to a minimum of 450 staff in the NICS in the last year. These groups have included local government, education establishments, emergency services and community groups.

Work taken forward under the policy work stream included the delivery of a GI Awareness Seminar to Office of First Minister and Deputy First Minister (OFMDFM) Grade 7 officials who are policy leads. There was very positive feedback about the event raising the potential of GI to policy leads. A GI element is now being developed in the policy course delivered by the Centre of Applied Learning.

Other awareness raising events have also taken place, such as one in the Department for Social Development's (DSD) Analytical Services Unit (ASU) which held an open day for colleagues across DSD. As part of this open day a specific session was held on GI developments within ASU (as well as a number of parallel sessions incorporating GI as part of the presentations). In total over 100 DSD staff attended the day across all grades.

Making decisions on funding for women's groups



The Office of First Minister and deputy First Minister (OFMDFM) undertook to provide a report for Ministers' consideration on the extent and coverage of government grants currently available to women's groups providing services in their community; how these groups support and complement the development and delivery of public policy and services; and their future funding prospects.

The project board for the review included senior officials from OFMDFM and DSD, and volunteers from the Gender Advisory Panel, representing key stakeholders and a wide range of skills and experience. This review team sought contributions from other departments and public bodies, key voluntary and community sector representatives and from meetings with women's groups and representatives.

The review included an analysis of funding from departments, which over the period 2008–11 amounted to £35 million. Using GI to map the locations and characteristics of groups and the services they provided against the 2010 indices of deprivation, the review provided maps to help communicate information about the distribution and use of government funding across each Parliamentary Constituency.

The work helped ensure that information regarding funding for services in each Parliamentary Constituency, such as child care, could be clearly and easily displayed. The work also enabled Government departments to interrogate the data with regard to the level of funding that was delivered directly into areas with the highest levels of deprivation.

2.3 Increased skills

In the NICS



Widening and deepening the GI skills base in NICS is an essential component in the GI Strategy. An appropriately skilled workforce will be able to use GI to deliver improved policy outcomes and efficiencies in Northern Ireland.

Staff are now creating a blueprint for delivering and sustaining necessary GI understanding and skills across the NICS. This work is being taken forward by the Chief Survey Officer as the Head of GI Profession. As a first step, a GI skills survey was distributed. The survey information gathered on the current size and shape of the GI profession is helping to determine how to develop the careers of those staff already involved in GI work, and to ensure that the necessary skills are available in the future to be able to use GI to improve the effectiveness and efficiency of service delivery and policy development.

Through NI Maps



From March 2010 until January 2011 a total of 7,721 teachers and pupils in a variety of educational establishments in Northern Ireland accessed the new NIMaps online mapping resource. This resource is available through LearningNI and available to all primary and post primary teachers and pupils in Northern Ireland. Training has been offered to all educational support organisations and to date 650 participants have undergone training. The system gives access to a large range of online resources such as Northern Ireland maps, historical mapping and aerial photography. Pupils can learn navigational skills, can see two views of the same location on screen at the same time and can link to other thematic datasets. They can also upload and share dynamic multimedia resources such as videos, presentations and web links. In the Post Primary sector, initial results indicate that the majority of users are "Non Geography Teachers". This seems to indicate that NIMaps is being used as a cross-curricular resource, not just a mapping tool for the Geography department.

Further work is being progressed by the Council for the Curriculum, Examinations and Assessment (CCEA) to develop a level 2 GIS qualification which will form a major element of a 'Space, Science and Technology' qualification, to be offered as part of the Entitlement Framework. Meanwhile, the South Eastern Regional College and Open College Network Northern Ireland are working to develop a Level 3 GIS qualification.

2.4 Increased use

For disease management



The Department of Agriculture and Rural Development currently has two LPS GI consultants on secondment from LPS. One aspect of their work involves a Proof of Principle study geared towards examining the use of geographic information in disease management. Specifically, it focuses on allowing Veterinary Service staff to automate sample selection for epidemiology studies where spatial data is involved.

Given tabular data relating to animals known to be infected with disease, for instance the identification number of a bovine herd known to be infected with tuberculosis, models can be created using GIS software to identify the spatial location of the infected herd, and subsequently to identify those fields contiguous to the infected herd that would as a result need to be tested. This is vital for disease control and eradication, especially in supporting DARD's tuberculosis eradication programme.

Where previously this work would be done manually, GI can be deployed to produce mapping and tabular output for singular and/or multiple areas of infection instantaneously. Investigative work is also being carried out to deliver this technology via the web, thereby allowing similar analysis to be carried out in the field in real time.

In future, analysis will also be undertaken so that multiple layers can be examined at the same time to identify land more susceptible to disease outbreak, thereby allowing risk based testing. These areas can then be given increased weighting in any testing algorithms.

Fraser Menzies, a Veterinary Officer at DARD's Epidemiology Branch of the Epizootic Disease and Veterinary Public Health Unit, stated:

“This really is ground breaking stuff. This work allows us to undertake projects involving identification of spatial association that were previously not feasible due to them being too resource intensive.”

Through GeoHub NI®



GeoHub NI, the data sharing web portal for Northern Ireland, has seen a steady increase in its use. In March 2011 the number of unique logins increased to 2,432. To date there have been over 96,000 logins to the portal in total. There has also been an increase in the number of organisations contributing data sets to the portal which currently holds over 250 layers of data.

Through entrepreneurs



Outreach to entrepreneurs was initiated through a workshop with Department of Enterprise, Trade and Investment Innovation Division, Momentum and The Digital Circle. The workshop discussed ways to incorporate GI into the development of mobile location based services. This resulted in the creation of a new 'mobile phone developer app' licence by LPS to accommodate data access. It is intended to progress outreach to entrepreneurs in further strategy implementation plans.

The last year has seen a number of organisations in Northern Ireland take up or increase their usage of GI. Some examples are detailed below:

- The Probation Board Northern Ireland has recently acquired GI software licence and are conducting GI analysis, for instance of workloads of PBNI offices.
- The Ambulance Service of Northern Ireland now has in-vehicle GIS systems to assist in effective and timely operations.
- Northern Ireland Statistics and Research Agency has used the NI definitive address database, Pointer, for posting out the 2011 Census for the first time.
- The Public Health Agency has recognised that GI has an important role to play in health prevention and has recently put in place GI licences in their Ballymena and Armagh offices with Belfast and Londonderry offices to follow.

2.5 Better service locations

In the Strategic Investment Board



The Strategic Investment Board (SIB) is currently using GI for work relating to the location of schools, libraries and police stations. They are working in conjunction with various departments on using GI to determine the optimal sites for a range of public services ensuring that they are placed where they are most needed and are of benefit to all. GI is also informing the work of the newly established Asset Management Unit.

In the health sector



The Northern Office of Health and Social Care is using GI to analyse the location of patients for its 350 General Practitioner's (GPs). Staff are using GI to create a spatial model to determine those patients who may be affected when a GP Practice wishes to alter its practice area. The aim of reducing a practice radius is to reduce the travel distance and therefore the time that a GP has to travel to make a house call on a patient. When the Bushmills surgery decided to reduce its practice radius, GI was used to analyse how the shrinkage would affect its current patients. This analysis enabled a list of affected patients to be created and the practice to carry out a consultation exercise with each family. The radii of the surrounding GP Practices was shown providing an illustration of the availability of an alternative GP Practice for the affected patients.

For housing



In 2010 the Northern Ireland Housing Executive (NIHE) developed a new system, 'Unmet Need Prospectus', which can be found at: www.nihe.gov.uk/index/wwu_home/unmet_need_prospectus.htm

The prospectus prioritises areas of unmet social housing need by addressing the Social Housing Development Programme (SHDP) shortfall for each NIHE District in accordance with the Housing Executive's Strategic Guidelines for new social housing. It identifies and guides Housing Associations and developers towards suitable locations throughout Northern Ireland where a need for social housing currently exists. A brief is included for each location providing an outline of housing need and the preferred accommodation requirements. An integral part of this is the use of maps detailing the settlement and the development limit where new housing is required. This has been facilitated via GIS. The use of GIS means associations and developers can see at a glance exactly where new housing is required, without the need for phone calls or written communication to Area Planners at the outset, and are able to match potential development sites to unmet need. GIS is an essential component to enable NIHE to communicate effectively with their key stakeholders on this important area of their work.

2.6 Data-access, sharing and standards

For online planning



Planning work in the Department of the Environment rolled out its new electronic planning system to Area Planning Offices during 2010. ePIC (Electronic Planning Information for Citizens) allows all participants in the planning process to access information in a more efficient way. The Northern Ireland Planning Portal is the main interface to ePIC which enables the public to submit planning applications on-line, pay the appropriate fee online and track the progress of the application. The ePIC back office systems ensure that files are allocated and processed in a timely manner. Consultations are issued and returned electronically. ePIC went live to planning staff and consultees during 2010. The public presently has access to a web portal for viewing applications and associated documents. During 2011, the full system will roll out to the public and agents enabling them to submit their applications on-line.

ePIC makes use of Northern Ireland geographic information throughout the different stages of the planning process. Mapping tools provided on the Portal allow applicants to plot the boundary of their planning applications and query the system for planning history. Base mapping is updated quarterly, and the new mapping formats supplied by LPS have speeded up this process.

ePIC has a heavy reliance on the NI address database Pointer, particularly for neighbour notification. Pointer updates are applied on a regular basis and regular electronic updates from local government have greatly improved the overall reliability of the information. Aerial photography has also proved very useful to staff involved in the enforcement process. Improved flying frequency and resolution can only be of benefit to staff.

The Public Access Site can be accessed at:

www.planningni.gov.uk/index/tools/public-access-info.htm

For NI place-names



The NI place-names website **www.placenamesni.org** was developed by LPS to provide a tool to access and view the database of place-names information collected by the Place-names project. To date, information has been added for County Down. The site enables members of the public to search for place-names using keywords or to browse through a selection of maps for places of interest.

The Northern Ireland Place-Name Project was established in 1987 to research the origin and meaning of the place-names of Northern Ireland. The Northern Ireland Place-Name Project grew out of the work of the voluntary Ulster Place-Name Society established in 1952, and supports the aim of the Scottish Place-Name Society to achieve a similar centre for the study of place-names in Scotland.

The place-names of Northern Ireland include those of six counties, 60-plus barony and district names, 269 parishes, 9,600 townlands and at least 20,000 other names, in the languages of Irish Gaelic, English and Scots, with a few names in Latin or Old Norse. The gazetteer compiled by the Northern Ireland Place-Name Project is still growing, with current additions including both traditional names of fields and of modern streets. There has always been a strong 'community relations' aspect to the work, since everyone lives in a place.

2.7 Website



A NI GI Strategy website was launched in December 2010 with an aim of communicating what is happening locally both on the GI Strategy work and on INSPIRE in Northern Ireland. The site is located at: **www.gistrategyni.gov.uk**

The site contains a news section which has local, UK and European wide GI articles which are updated on a monthly basis.

To date (with minimal promotion) the site averages over 150 visits per month with viewers from a wide range of countries including Spain, Germany, Belgium, Romania, Poland, Canada and Norway.

Governance

3.1 Delivery Board

The Delivery Board was set up to oversee the implementation of the strategy. It meets quarterly and its responsibilities are to:

- Drive the implementation of the GI Strategy 2009–2019;
- Administer resources and funding for any projects to be taken forward;
- Assist in driving forward the implementation of INSPIRE in Northern Ireland;
- Promote the benefits of geographic information in delivering improved services for Northern Ireland;
- Support the development of skills and knowledge to exploit GI within Northern Ireland;
- Represent the Northern Ireland GI community on the UK Location Council and liaise as appropriate with relevant activity in Ireland; and
- Report progress and issues to the NI GI Council.

Between March 2010 and March 2011 the Delivery Board met four times. The meetings, venues and introductory presentations are listed below:

May 2011

Venue: The Mount Business & Conference Centre, Belfast.

Presentation: AGI foresight study—A vision of the geospatial industry in 2015 by Andy Coote.

July 2010

Venue: Land & Property Services (LPS) Colby House, Belfast.

Presentation: Demo of the 3D Geo-visionary suite in Colby House by Keith Montague.

October 2010

Venue: Northern Ireland Statistics and Research Agency (NISRA), McAuley House, Belfast.

Presentation: The use of GI in operational planning and analysis of the 2011 census by Brian Green.

January 2011

Venue: Northern Ireland Environment Agency, Gasworks Building, Belfast.

Presentation: NIEA GI work by Wendy McKinley

The organisations represented on the Delivery Board cover many sectors and departments. They are listed below:

- Northern Ireland Statistics and Research Agency
- Northern Ireland Electricity
- Planning Service Northern Ireland
- Northern Ireland Housing Executive
- C2K Northern Ireland
- Land & Property Services
- Association of Geographic Information
- Office of First Minister and Deputy First Minister
- South Eastern Regional College
- Department for Social Development
- Department of Agriculture and Rural Development
- UK Location Programme
- Northern Ireland Assembly
- Northern Ireland Fire and Rescue Service
- Department of Regional Development
- University of Ulster
- Northern Ireland Environment Agency
- Society of Local Authority Chief Executives (SOLACE)
- Department of Justice

3.2 GI Council

Members of the Council were selected to include a broad range of public, private, voluntary and academic sectors at senior levels. Members bring their personal skills and expertise, their knowledge of their own organisation and, importantly, awareness of the need within their various sectors.

The overarching role of the GI Council is to:

- Provide high-level advice on the implementation of the GI Strategy for NI, reflecting the views of key sectors;
- Advise the GI Strategy Delivery Board in framing and prioritising implementation plans; and
- To support the vision of GI Strategy

Those represented on the GI Council are listed below:

- Permanent Secretary, Department of Finance and Personnel
- Chief Survey Officer for Northern Ireland
- Chairman of SOLACE NI
- Director of Communication, Policy and Strategic Support, Department for Social Development
- Chief Executive, Planning Service NI
- Chief Executive Designate, Education and Skills Authority
- Chief Executive, Roads Service NI
- Professor of Physical Geography, Queens University Belfast
- Chief Executive Officer, Belfast Health and Social Care Trust
- Chairman of the Confederation of British Industry (CBI) NI
- Strategic Investment Board
- Royal Institution of Chartered Surveyors
- Chief Executive W5
- Chief Executive Invest NI
- Director, NI Environment Link
- Chief Executive Officer, Land & Property Services
- Director, Corporate Services Group, Department of Finance and Personnel
- Chief Executive, Northern Ireland Statistics and Research Agency

3.3 GI forums

There are currently five GI strategy forums operating under the GI Strategy. The forums are responsible for taking forward different areas of work and feeding information back to the Delivery Board. Forums can be based around themes or topics of interest and can be set up as required. The current forums are listed below:

- NI INSPIRE forum
- Utilities forum
- Pointer stakeholder forum
- Statistics forum
- Public Safety and Emergency Services forum

Implementation plan for 2011–12

For 2011–12, it was decided that the focus of the Delivery Board should shift from reviewing a wide range of work underway, to seeking to influence some key strategic strands of GI usage. The Delivery Board resolved that it should “Seek to influence, advise and support the GI community in Northern Ireland, sharing best practice across a variety of key organisations”

Current work strands that were started in 2010–11 will continue as ongoing operational strands, while a small number of key strategic strands have been agreed as the focus for the Delivery Board for 2011–12.

The work that has been agreed by the Delivery Board to take forward for 2011–12 is noted below.

4.1 Strategic strands

[1] Common address usage — driving uptake and use

The principle of Pointer, the definitive NI address database, being used across the NICS is widely agreed. It is the task of GI Strategy stakeholders to drive the uptake and use of Pointer. This was agreed by the Board as a priority issue for the implementation of the strategy, as addresses are the key underpinning identifier for all population geography. Work will include the identification and highlighting of initial risks and costs of uptake versus potential benefits. Ensuring that Pointer is embedded in key commercial address systems will also be an important element.

[2] NI data centre

In 2011 we will see a significant amount of work relating to data sharing with the creation of a new NI data centre. The new system will provide a means to find, view and download key NI data sets. It will provide access to data through address or map searches. This system will in time replace the current GeoHub NI. The creation of web services will be key to the new system. The new data centre will also be the means for Northern Ireland to comply with the EU INSPIRE Directive. This will drive standards and drive transparency in data set availability. It will open up the use of web services in Northern Ireland for key datasets and widen access to NI data through linkages with the UK data.gov portal and the EU INSPIRE portal. The creation of an INSPIRE data portal for Ireland will also open up the opportunities for cross border data related to collaboration projects. The potential to link with entrepreneurs in developing location based service applications will also be facilitated through the development of the data centre and its linkages with the data.gov.uk site.

[3] Access to public services

This strand aims to make a real difference to people's lives, connecting to both citizens and businesses, by influencing, supporting and sharing best practice. Identifying where spatially enabling information can make a difference to citizen's lives will be the key priority. It is envisaged that linking with NI Direct as the official government website for Northern Ireland and primary telephony service for the civil service will enable the delivering of both information and services which will be the key piece of access to services work. Delivering a two way mechanism for the citizen to both 'pull' information, for example through a government utility notifying when services may not be available to the citizen, and 'pushing' information such as reporting a broken street lamp on their street, can be facilitated.

Initial work will identify the top questions that the public ask both NI Direct and District Councils (using Larne Borough Council as a case study). Work can then take place on identifying how the use of GI—ranging from a simple address form to a map—can assist in delivering efficiencies in different departments.

[4] GI skills

This strategic strand aims to define the scope of the GI Profession in the Northern Ireland Civil Service, with the goal being that all Civil Servants have enough knowledge to use GI in their work. Initial work has been carried out on a competency framework to identify GI skills. Further work in 2011/12 will define a user base and recognise areas where GI skills would assist. An external qualification framework is also being developed by South Eastern Regional College.

4.2 Operational strands

These will include:

- NI Assembly: continuing to embed GI into research work and reports in the Northern Ireland Assembly and using GI in the scrutiny process.
- Embedding GI at Primary and post primary schools: continuing the work of C2k in encouraging NIMaps used across subject areas within all primary and post primary schools in Northern Ireland.
- Influencing policy: continuing to influence policy makers where possible about the benefits of utilising GI.
- Data harmonisation: continuing the work of the LPS & DARD project in updating rural field boundaries in relation to the EU Single Farm Payment scheme.

4.3 Governance review

The Delivery Board will continue for 2011-12 as before. However, the role and functioning of the GI Council is being reviewed following two meetings, to ensure that it is working as effectively as possible. One option currently being explored is to hold a high profile NI GI Conference in the autumn of 2011 to engage senior managers from all sectors in learning about and influencing the future direction of the GI Strategy work.

The NI governance also continues to have strong linkages with the UK Location Programme, with the Chair of the Delivery Board sitting on the UK Location Council. Northern Ireland is also represented on the UK Programme Board and some of the working groups such as the metadata working group and the co-ordinate reference group.

The UK Location Programme annual report for 2010-11 is available on their website at:

<http://location.defra.gov.uk/>

Appendix 1

Delivery Board 2010–2011

Iain Greenway (Chair)	Chief Survey Officer for Northern Ireland
David Marshall	Northern Ireland Statistics and Research Agency
Declan Gribbon	Northern Ireland Electricity
Eamon Leneghan	Planning Service Northern Ireland
Esther Christie	Northern Ireland Housing Executive
George Blackwood	C2K Northern Ireland
Jim Lennon	Land & Property Services
Conor Smyth ¹	Association of Geographic Information
James McEldowney	Office of First Minister and Deputy First Minister
Ken Webb	South Eastern Regional College
Michelle Crawford	Department for Social Development
Paul McGurnaghan	Department of Agriculture and Rural Development
Ray Boguslawski	UK Location Programme
Robert Barry	Northern Ireland Assembly
Robin Bigger	Northern Ireland Fire and Rescue Service
Ross Donaghy	Department of Regional Development
Trevor Steenson	Land & Property Services
Stephen Roulston	University of Ulster
Wendy McKinley ²	Northern Ireland Environment Agency
Geraldine McGahey	Society of Local Authority Chief Executives (SOLACE)
Robert Freel	Department of Justice

NI GI Council

Stephen Peover (Chair)	Permanent Secretary, Dept of Finance and Personnel
Iain Greenway	Chief Survey Officer for Northern Ireland
Trevor Polley	Chairman of SOLACE NI
Dave Wall	Director of Communication, Policy & Strategic Support, Department for Social Development
Cynthia Smith ³	Chief Executive, Planning Service NI
Gavin Boyd	Chief Executive Designate, Education and Skills Authority
Geoff Allister	Chief Executive, Roads Service NI
Professor Julian Orford	Professor of Physical Geography, Queens University Belfast
William McKee ⁴	Chief Executive Officer, Belfast Health and Social Care Trust
Terence Brannigan	Chairman of the Confederation of British Industry (CBI) NI
Martin Spollen	Strategic Investment Board
Michael Hannaway	Royal Institution of Chartered Surveyors
Sally Montgomery	Chief Executive W5
Alastair Hamilton	Chief Executive Invest NI
Sue Christie	Director, NI Environment Link
John Wilkinson	Chief Executive Officer, Land & Property Services
David Orr	Director, Corporate Services Group, Department of Finance & Personnel

1 Conor Smyth left the Delivery Board in April 2011 as he moved to a new post. His replacement is the new Chair of NI AGI—Simon Wheeler

2 Wendy McKinley left the Delivery Board in April 2011 as she took up a new post; her replacement is Patricia Corker

3 The Planning Service was subsumed into the Department of Environment

4 William McKee retired from his post

