

1 GBS Profile

GBS (Geographic Business Solutions) is an established and privately owned GIS consultancy company, with a proven track record delivering high quality strategic consulting, application development and related GIS services to its clients.

GBS is vendor independent and concentrates on providing the most appropriate solutions to meet client's business needs, rather than being involved in software sales. The company has no GIS software reseller arrangements.

GBS is an authorised ESRI Business Partner which enables us to deliver the highest standard of service to our ESRI based clients.

After more than 10 years as independent GIS consultants, the company's directors established GBS in July 2002. GBS has quickly become an established and recognised GIS consultancy in New Zealand. The company derives its strength from the expertise of its principals, Harley Prowse and Tony Elson and its highly skilled employees. The company aims to provide independent, comprehensive and cost-effective GIS consulting services to the GIS communities in NZ and Australia.

GBS and its staff have experience in GIS consultancy and application development in a variety of industry sectors, including transport, local and central government, utilities (electricity, gas and water), retailing, forestry and viticulture. The company has undertaken work for a wide range of clients, from large industry leaders such as:

- Ravensdown Fertiliser Co-Operative
- Auckland Motorway Alliance
- Genesis Energy
- Vector/United Networks
- PowerCo
- Rayonier Forests
- United Water International (subsidiary of Thames Water)
- Scion (Forest Research Institute)
- Nobilo Wine Group
- Auckland Council
- Environment Bay of Plenty

As well as smaller clients such as:

- Ace Air-conditioning
- Tasman District Council

- Papakura District Council
- Marlborough District Council
- Nelson City Council
- Rotorua District Council
- Gisborne District Council
- Urgent Couriers Ltd.
- BTW Corporation

GBS offers the following services:

- GIS and IS project management
- GIS and IS strategic consulting including:
 - strategic planning, strategic reviews, system selection, implementations, management and enhancements
- GIS and IS business analysis including:
 - cost-benefit analysis, user needs assessments, data quality procedures and methodologies, data model design and review, and tendering process management
- GIS application design and development (Desktop, mobile and web based)
 - C#, Flex, Silverlight, web services, map services, data services, geo-processing web services, ESRI Flex API, ESRI Silverlight API, ArcGIS Server, ArcSDE, ArcGIS Desktop, ArcGIS Mobile, MS SQL server, SQL Compact, MS Compact Framework for mobile applications.
- Data integration, data analysis and map production
- Contract GIS management.

GBS uses a Prince II based project management methodology and employs Agile software development strategies by preference and where appropriate. In particular GBS has successfully used SCRUM on multiple software development projects (of varying sizes).

GBS operates from a professional suite of offices in Mt Wellington, Auckland. The office is well equipped with:

- high powered desktop and server computers for application development
- multiple test computers (servers and desktop)
- a centralised source code version control system and issue tracking software

- Multiple mirrored hard drives for added data security
- and a comprehensive back-up regime (including off site back up).

1.1 GBS Company Profile

Name: **Geographic Business Solutions Ltd**

Status:	Registered New Zealand Company AK/1218911
Years in Operation:	9 years (Incorporated June 2002)
Staff:	2 Directors, 2 GIS Consultants/Developers, 4 GIS Developers and one part time office administrator.
Indemnity Insurance:	Professional and Public Liability to \$2,000,000
Contact:	Harley Prowse, Tony Elson, Company Directors
	Ph. +64 9 570 3875
	Fax. +64 9 574 6918
	Email: harleyp@gbs.co.nz , tonye@gbs.co.nz
Postal Address:	P.O. Box 272-1387
	Papakura 2244
	New Zealand
Physical Address	Level 3, 45 Mt Wellington Highway
	Mt Wellington
	Auckland
	New Zealand
WEB	www.gbs.co.nz

2 GBS Personnel

2.1 Harley Prowse - Company Director

Qualifications

- Master of Science (Geography), University of Auckland
- Bachelor of Science (Geography), University of Auckland

Relevant Experience

Harley Prowse is an established GIS consultant with a strong background in physical geography. He has considerable experience (over 16 years) with respect to all aspects of GIS including project management, strategic planning, business analysis, user needs assessment, application design and development, and data analysis, integration and capture.

Harley has undertaken GIS consultancy for a range of organisations across diverse industry sectors. Examples of some of the companies that Harley has consulted for are: Genesis Energy, Rayonier Asia Pacific, Vector, Urgent Couriers Ltd, Nobile Wine Group, Wellington City Council, Marlborough District Council, Nelson District Council, Taupo District Council, Rotorua District Council, Papakura District Council, Ravensdown Fertiliser, Auckland Regional Council and Environment Bay of Plenty.

Harley has experience with a range of GIS systems including ESRI software (ArcGIS, ArcView, ArcPad, MapObjects, ArcObjects), GenaMap, MapInfo and SmallWorld. He has years of experience in software design and development using AML, Avenue, VBA, VB and VB .Net.

These days Harley's primary roles within GBS are business development, account management and project management

2.2 Tony Elson - Company Director

Qualifications

- B.SocSci (Hons), University of Waikato

Relevant Experience

Tony has specialised in the GIS field for over 15 years, primarily as a consultant, contracting either independently or with GIS consultancies.

Tony has worked in GIS for a range of organisations in a number of industry sectors, and has worked with the following organisations: Progressive Enterprises, United Networks (now Vector), United Water International, Papakura District Council, Auckland Regional Council, Auckland Council, Rotorua District Council, Christchurch City Council, Taupo District Council, United Networks, Ace Air Conditioning and the New Zealand National Party. In the last few years he has assisted Visitor Solutions in the areas of urban infrastructure, community development, sport, leisure and outdoor recreation. This has included demographic analysis and infrastructure placements and configurations.

With strong management and applied GIS skills, Tony specialises in project management, strategic planning, project design, user needs assessment, application and data design and development, and data integration. He has worked with a wide range of GIS and associated systems with experience in integration with asset management systems, records management systems and property databases.

2.3 Shane Pienaar - Senior GIS Consultant

Qualifications

- Bachelor of Science (Geography), University of Auckland

Relevant Experience

Shane is an experienced GIS Developer with over 11 years experience developing GIS solutions in both the commercial and public sectors. Shane arrived at GBS from the Auckland Regional Council (ARC) where he had spent 8 years involved in the development of a range of successful and large scale GIS projects.

Shane brings an excellent technical skill set to projects. Shane operates as a technical lead and team leader for most of GBS' projects. He is very experienced and adept at interpreting organisational requirements into successful technical solutions. In particular he has focussed on delivering location based solutions over the internet (i.e. web mapping solutions). Some examples of the projects Shane has worked on for GBS are:

- Courier Dispatch Mapping Application – Urgent Couriers – Open Source
- RavTrak (Spreader truck performance analysis) – Ravensdown – ArcGIS Server and ASP .Net (C#)
- ArcFM Tools – PowerCo – ArcFM, ArcObjects and C#.
- ArcGIS Upgrades – Various Clients – Upgrading ArcSDE and ArcGIS Server
- Sports Facilities Inventory Pilot – SPARC – GeoSmart API, PostGIS and JavaScript
- ARC – Interprets – Web map based socio-economic data analysis tool – ArcGIS Server, Flex API, .NET Web services (C#)
- AEGIS – Horizons Regional Council – Pilot emergency management system – ArcGIS Server, Flex API, .NET Web services (C#)
- Walking Access Commission - ArcGIS Server, Flex API, .NET Web services (C#)
- Top Of The South Maps - ArcGIS Server, Flex API, .NET Web services (C#)
- Terralink Map Viewer - ArcGIS Server, Flex API, .NET Web services (C#)
- PowerCo Map Viewer - PowerCo Map Viewer - Silverlight, C#, ArcGIS Server, ESRI Silverlight API.
- SCION Map Viewer - PowerCo Map Viewer - Silverlight, C#, ArcGIS Server, ESRI Silverlight API.

Shane has proven software design and development skills and experience. He has undertaken development projects using ArcObjects, ArcGIS Server, ArcIMS and Open Source web mapping technologies using a variety of software development languages.

Shane is also a very experienced administrator of ArcIMS, ArcGIS Server and ArcSDE.

2.4 Matthew Simmons - GIS Developer

Qualifications

- Bachelor of Science (Computer Science), University of Canterbury

Relevant Experience

With a background in software engineering, Matthew's GIS experience was initially gained while working at the Christchurch City Council. Matt brings expert data modelling skills to the team as well as solid software development skills and experience.

Matt will be focusing on ESRI Desktop and Server application development projects. Matt has development experience using ASP .NET, C#, ArcObjects, ArcGIS Server (including mobile), SQL Server and the Microsoft Mobile Framework, Flex and Silverlight.

Some examples of the projects Matt has worked on for GBS are:

- SCION Map Viewer - PowerCo Map Viewer - Silverlight, C#, ArcGIS Server, ESRI Silverlight API.
- AMA HIS – Silverlight, C#, ArcGIS Server, ArcObjects, ESRI Silverlight API.
- GIS Consortium – Printing and Workspace widgets for GISMO - ArcGIS Server, Flex API, .NET Web services (C#)
- ARC – Biomap 2.0 – Biosecurity mobile and web mapping based applications – ArcGIS Server Mobile, SQL Server DB, C#, .Net Web services.
- BTW Company – Web mapping portal– ArcGIS Server, Flex API, .NET Web services (C#)
- GeoMapper – Enhancements and maintenance of GBS' desktop mapping solution for forestry – ArcObjects, VB .Net

2.5 Sam Drummond - GIS Consultant

Qualifications

- Bachelor of Science (Geography), University of Canterbury

Relevant Experience

With a background in geography, Sam is a bit of a spatial technology junkie who enjoys making things work smarter not harder. His experience with ESRI software comes from his time working at LINZ and Tasman District Council, where he worked as a GIS analyst with development interests.

Sam's focus within GBS is on GIS application development (desktop and server) as well as strategic GIS consultancy. Sam has development experience using ASP .NET, C#, ArcObjects, ArcGIS Server, SQL Server and Flex.

Some examples of the projects Sam has worked on for GBS are:

- Terralink Map Viewer - ArcGIS Server, Flex API, .NET Web services (C#)
- Top of the South Maps - ArcGIS Server, Flex API, .NET Web services (C#)
- ARC – Biomap 2.0 – Biosecurity web mapping based applications – ArcGIS Server, Flex API, .NET Web services (C#)

- AEGIS – Horizons Regional Council – Pilot emergency management system – ArcGIS Server, Flex API, .NET Web services (C#)
- Walking Access Commission - ArcGIS Server, Flex API, .NET Web services (C#), ArcObjects, and custom ArcGIS Desktop applications.
- ArcGIS Server and ArcSDE installations and upgrades
- Implementation of Geometric Networks for water, waste and storm water networks
- ArcObjects development using VB .Net and C# for various GBS clients.

2.6 Loan Burger - GIS Developer

Qualifications

- National Diploma in Information Technology, Walter Sisulu University, East London, South Africa
- Bachelor Degree of Technology Tourism Management, Walter Sisulu University, East London, South Africa
- National Diploma Hospitality Management, Pretoria Technikon, Pretoria, South Africa

Relevant Experience

Loan is relatively new to GIS but has more than 3 years of software development experience under his belt now (using VB .Net, C#, and SQL server). Loan's role with GBS will be primarily as a web developer using C#, ASP .Net and Silverlight.

Some examples of the projects Loan has worked on for GBS are:

- Terralink Map Viewer - ArcGIS Server, Flex API, .NET Web services (C#)
- Marlborough District Council Silverlight Web editing component - Silverlight, ESRI Silverlight API, C#, ArcGIS Server
- AMA HIS – Silverlight, C#, ArcGIS Server, ArcObjects, ESRI Silverlight API.
- SCION Map Viewer - PowerCo Map Viewer - Silverlight, C#, ArcGIS Server, ESRI Silverlight API.

2.7 Ardeshir Gheidian - GIS Developer

Qualifications

- MCTS .Net 2, Web-based Client Development Certificate
- M.Sc. degree in Applied Physics, Tehran University
- B.Sc. degree in Applied Physics, Isfahan University of Technology

Relevant Experience

Ardeshir is relatively new to GIS but has been developing software solutions since 1994. Ardeshir has considerable experience designing and implementing SQL server databases as part of windows and web based software development projects. Since 2006 he has primarily been developing web based solutions.

Ardeshir's primary role within GBS is as a web developer. Some examples of the projects Ardeshir has worked on for GBS are:

- NZ Walking Access Commission - Enquiry management System - Silverlight, C#, MSSQL Server
- Ravensdown Fertiliser Limited – ROAM Project - Silverlight, C#, AGS Server, MSSQL Server
- Internal web based resource planning application - Silverlight, C#, MSSQL Server, ArcObjects.
- PowerCo Map Viewer - Silverlight, C#, ArcGIS Server, ESRI Silverlight API.

2.8 Jan Roggisch - GIS Developer

Qualifications

- University of Bonn – Geography degree equivalent to Bachelor of Science degree with honours in NZ.

Relevant Experience

Jan is an experienced GIS professional who has been in the GIS industry since 2004 in Germany and NZ. Arriving in NZ in early 2007, Jan based himself in New Plymouth and was the New Plymouth District Council (NPDC) GIS Developer until joining GBS in March 2011.

Jan has many years of experience setting up and administering ArcSDE and ArcGIS Server and managing web mapping applications. While with NPDC Jan gained experience managing the councils GIS data and setting up automated data management processes using C#, Python and FME.

With GBS, Jan will be focusing on web development using C# and Silverlight as well as making good use of his GIS data management expertise including Python and FME.