



Smarter
Location
Intelligence

Case Study NZ Transport Agency

In Oct 2014 the NZ Transport Agency (NZTA) launched MapHub, which comprised of a range of user focused mapping capabilities based on Portal for ArcGIS (Portal) and integrated with new Geospatial Enterprise Framework. The MapHub solution provides NZTA with a centralised portal of geospatial information and enables their business to create a range of purposeful maps and applications which support evidence based analysis.

Background

The NZTA is a Crown entity with 1400 staff working in 14 locations across NZ. Their purpose is to deliver transport solutions for New Zealand on behalf of the government which makes every New Zealander their stakeholder.

The NZTA is responsible for:

- Developing NZ transport strategies
- Performing detailed planning of investment proposals
- Assessing and distributing funding for the State Highways/ Local Roads and other transport networks
- Maintaining the SH Network
- Providing access to the transport networks and;
- Managing the use of the transport network and monitoring the performance of the transport network so this can inform future strategy and planning.

In 2012 the NZTA initiated the Common Geospatial Capability (CGC) project with the objective to deliver a suite of best practice geospatial capabilities, processes, tools and data to support the NZTA's current and future strategic business priorities.

GBS was a part of the NZTA's geospatial suppliers' panel, in collaboration with other organisations, and was tasked with establishing the detailed design and implementation for the geospatial web based user tools.

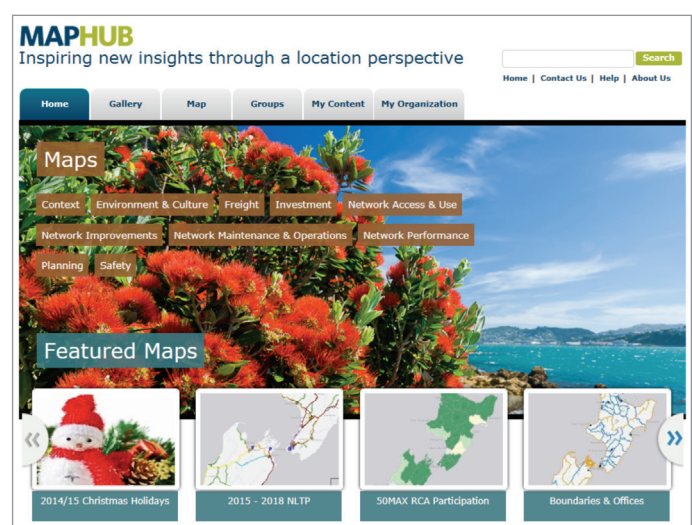
The solution implemented by GBS leveraged and extended Portal 10.2.1, where bespoke application tools were developed along with a custom Portal home page. This solution was successfully released into Production in August 2014 as MapHub 1.0. An enhanced MapHub 2.0 solution subsequently went live in September 2015. This new release includes additional functionality as well as some modifications.

The GBS challenge

During the initial requirements gathering phase of the MapHub 1.0 project it was identified that the NZTA were clear on their high level requirements, and wanted to work more collaboratively with GBS to clarify and confirm the detailed requirements.

As NZTA had very tight project timeframes that they wanted to meet, GBS took a flexible approach, and introduced a Proof of Concept (POC) methodology. Development was started as per the agreed schedule, where products whose requirements were confirmed and/or were high risk, were prioritised to be developed first. This allowed the NZTA to continue on the remaining detailed design, whilst GBS still made the required planned progress on development tasks.

MapHub 1.0 consisted of two POC phases, where the NZTA had early and consistent transparency on GBS' development progress,



Custom Home Page for ArcGIS for Portal

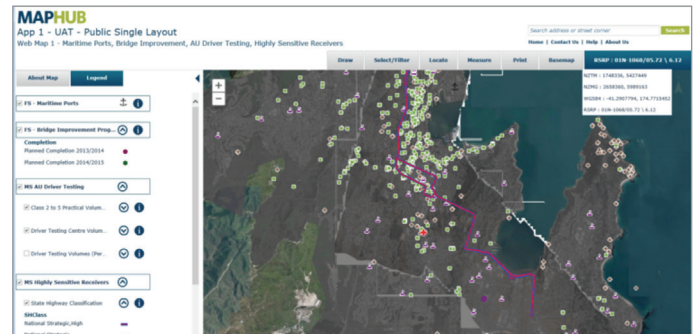
via regular demonstrations. This open approach allowed NZTA to adapt to their business needs. With the understanding that the planned final solution was no-longer going to be fit for purpose unless critical scope changes were accommodated, GBS and NZTA switched into a rapid-fire change management process.

This required a flexible but meticulous Project and Resource Management approach, as over 350 hours of change requests were scoped, and approved in quick succession over a very short timeframe. Development followed quickly after approval by the NZTA.

It was critical that the first release of the MapHub solution had the wow-factor, as user-uptake was the critical measure of success. This flexible approach paid off as MapHub 1.0 achieved this goal. The recent re-investment in the MapHub solution by NZTA to create MapHub 2.0 supports this conclusion further.

Benefits

- Supports NZTA's strategic direction and priorities.
- Enables effective performance measurement.
- Enables NZTA staff to engage with stakeholders from a credible position of knowledge and capability.
- Enables better decisions making based on geospatial evidence.
- Empowers NZTA staff responsible for analysing the Network and sharing this story with stakeholders to fulfil their roles more effectively and efficiently.
- MAPHUB provides web application users with a powerful range of out of the box and customised tools.
- MAPHUB allows the NZTA to host all their applications in a professional centralised portal.
- MAPHUB can be integrated with other NZTA business systems including their Road Runner application which allows users to view videos of road inspection and its corresponding location in a web map.
- NZTA is no longer limited to a single map viewer, cluttered with geospatial information. MAPHUB provides the NZTA with a set of foundation templates to create and configure an unlimited amount of web applications with specific tools and information for targeted use.
- Users are able to perform unrestricted searches across all geospatial Portal items to see what data is available.



The GBS Solution

- Initial on-site consultation for requirements gathering for the high level design.
- A detailed design and fixed cost price for the full implementation.
- Development of web based user tools including:
 - A custom Portal home page
 - Custom Portal functionality
 - A re-useable Portal custom web mapping template; and
 - A number of custom tools.
- Project management of GBS resources using GBS PRINCE2 based methodologies integrated with NZTA's requirements and processes.
- Collaboration with other suppliers to deliver the overall ESRI solution - primarily Eagle Technology, e-Spatial and QuallIT.
- Delivery of MAPHUB.
- Training and handover to NZTA Portal administration staff, to enable them to maintain and administer Portal, and create and publish applications as required.
- On-going support.

“ MAPHUB inspires and enables our staff to create Transport solutions that help NZ to thrive. Without the agility, expertise and drive for results of the GBS team our big idea for a spatially enabled Transport Agency would not have become a reality. ”

Ben White
National Manager, Evidence, Insight & Geospatial
NZ Transport Agency