It’s nice to be told you’ve done a great job; it’s especially nice to be told you’ve done a great job by your peers, and it’s fantastic to know your work is helping your clients, stakeholders and communities achieve their wider goals.

It is particularly humbling then, that our team has been selected as a finalist in the NZ Engineering Excellence Awards for our work with Environment Canterbury and the development of a regional public transport accessibility model. And if that wasn’t enough, we were recently selected as a finalist in the Canterbury regional business awards. Clearly being recognised as successful is laudable, but it’s not what drives us. Rather providing value and adding innovation to projects is where we want to be recognised the most.

If you want to understand how we can add value to your business, stakeholders or community project, contact me for a chat on 021 556 864. Alternatively you can phone our office in Auckland, Christchurch or Queenstown to speak to another member of our team.

Steve Abley Managing Director
USING GIS TO UNLOCK THE POWER OF DATA

But the true value of this information is often unrealised because of the narrow range of applications for which it is used. Exploring the potential of existing data sets is a smart way of creating value for organisations. We are adding value to a number of organisations, including the New Zealand Transport Agency, New Zealand Police and many local government organisations by bringing together a variety of transport datasets and combining them with industry knowledge inside a geospatial environment to improve road safety.

SAFETY AND RISK PROFILING OUR STATE HIGHWAYS — SAFETYNET

SafetyNET is an innovative online interactive road safety tool developed for the New Zealand Transport Agency (NZTA). SafetyNET allows the NZTA and its consultants to readily identify those parts of the State Highway network where road safety performance is good or poor compared to national averages, where it is out of character with the expected safety performance, and where it has engineering and operational features that suggest it may be a high risk site in the future.

Displaying the information in a spatial manner enables users of SafetyNET to readily identify those high-risk parts of the State Highway network that warrant attention, to target their investigations accordingly. Hosting this information online allows users of SafetyNET to interrogate the input data and examine the outputs at a range of desired levels of complexity, scale and from any internet enabled computer.

The development of SafetyNET is a major breakthrough in the advancement of road safety in New Zealand. It is currently being used by the NZTA to inform the development of long term road safety programmes by aligning its investment in road safety with the intended function of each State Highway in New Zealand. SafetyNET provides an excellent demonstration of the value that can be added to data already collected by road controlling authorities.

www.safetynet.org.nz

IMPROVING INTERSECTION SAFETY – LEVEL OF SAFETY SERVICE

Level of Safety Service is a technique that compares the number of observed injury crashes at an intersection against the number of predicted crashes derived from crash prediction models.

The technique takes into account the speed environment, intersection form and amount of traffic travelling through an intersection. If the ‘actual’ crash performance is worse than the ‘predicted’ crash performance then this provides an indication of the likely potential for a reduction in the number of crashes.

The Level of Safety Service technique has been used to inform intersection intervention prioritisation studies in Auckland, Hastings, Wellington and Christchurch. These citywide studies would not have been possible without the use of a geospatial analysis platform. ArcGIS makes these studies achievable and economical because it can process and analyse large quantities of data in an automated and standardised manner.

For this project, the road attributes are combined with industry developed relationships to produce crash predictions, which enable comparisons with actual crash performance to be made.

The technique has been adopted by the New Zealand Transport Agency and is incorporated into their High-Risk Intersection Guide as an assessment technique for prioritising high-risk intersections for investigations across New Zealand.

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LESSONS LEARNT FROM THE REDESIGN OF WAIMAKARIRI DISTRICT COUNCIL STREETS DAMAGED IN THE CANTERBURY EARTHQUAKES COULD HELP OTHER LOCAL AUTHORITIES.

JEANETTE WARD, PRINCIPAL TRANSPORTATION ENGINEER AT ABLEY, OVERSAW THE REDESIGN.

“This project provides invaluable insights for local authorities who are faced with rebuilding after natural disasters, and those who want to maximise the improvement of their streets while rebuilding, even if it is an asset renewal project.” Jeanette said it also showed that the public can be highly supportive if they are part of the rebuild journey.

The September 2010 earthquake caused significant damage to streets in Kaiapoi, Pines Beach and Kairaki Beach. Most of the damaged streets were wide and lacked character. The Waimakariri District Council recognised an opportunity to improve these streets and promptly set up a Streetscape Team, including us and other consultancies. The improvement of the streets presented the following benefits:

- Improved amenity, safety and support of active modes of transport (walking and cycling).
- A more appropriate speed environment.
- Allows the community to actively contribute to the design process.
- Could be achieved without significant additional costs, over that of replacing like for like.
- Reduction of long term road maintenance costs.

“The process needed to reflect that the extent of damage was not known before starting the design. So, the designs needed to be flexible enough that the old and new would fit together and over time look like a consistent environment.” Jeanette said.

An approach for the larger areas was adopted whereby streets were classified as a certain type within a hierarchy and then design templates could be applied to those street types. Smaller areas were significantly more context sensitive. Opportunities for improvement where NZTA Emergency Reinstatement funding could not be used were developed as part of the recovery project through other funding sources. This ensured the opportunities to improve the streets were maximised.

Community views were sought on the inputs to the draft streetscape plans through feedback forms and community events such as Street Ideas BBQs. These events proved to be an educational opportunity for the community.

“At a higher level it encouraged people to think about their streets as a public space as well as for the movement of traffic, and that the two can be compatible,” Jeanette said.

The subsequent ‘Red’ and ‘Green’ land zoning decisions last year meant that Jeanette has recently revised the Streetscape Plans and consultation with the community is well under way. Although some of the work cannot progress until more is known about the future use of the Red Zone land, design opportunities such as placing off-road cycle paths against Red Zone boundaries (where there are no longer driveways) has improved safety outcomes further.

STAFF PROFILE: JEANETTE WARD

Our expertise in streetscape design, community engagement and project management is further strengthened with the appointment of Jeanette Ward as Principal Transportation Engineer.

Jeanette brings 18 years practical and diverse experience gained in both the UK and New Zealand.

Following September 2010, she has led the redesign of the damaged streets of Kaiapoi. Jeanette believes that streets are an important public space and their design can contribute to good community and urban design outcomes. Her presentations on this topic at forums such as the IPENZ Transportation Conferences have been well received.

For the past decade, Jeanette has focused on the project management of transport projects, traffic engineering/design and transport planning. She has worked on a wide variety of traffic and transportation projects from managing the implementation of transport network improvements, designing streets and cycling facilities, to safety audits and route option assessments. In 2007, while in the UK, she managed the design of a Park and Ride facility on a greenfield site in Salisbury, including all the interesting environmental challenges that accompany such projects.

Jeanette is currently a member of her local IPENZ Transportation Group committee and is in the final year of her Masters in Transportation Engineering which is she is undertaking part time. With any time left Jeanette enjoys tramping and cycling with her husband and two young sons.

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DOUBLE HONOURS FOR ABLEY

OVER THE PAST NINE YEARS, WE’VE GROWN TO BECOME THE LARGEST SPECIALIST TRANSPORTATION CONSULTANCY SOUTH OF THE BOMBAY HILLS.

THIS YEAR OUR EFFORTS AND EXPERTISE HAVE BEEN ACKNOWLEDGED, WITH HIGH HONOURS IN TWO PRESTIGIOUS EVENTS.

We’re delighted to be named a finalist in the New Zealand Engineering Excellence Awards. These are the premier event for engineering professionals in New Zealand that recognise leadership, innovation and entrepreneurship. The finalist nomination acknowledges our project work with Environment Canterbury and our development of a transport accessibility model that optimised public transport in post-earthquake Christchurch. We are the first specialist transportation consultancy to be named as a finalist in the history of the awards and that in itself is a significant acknowledgement of the success of our innovative team. Award winners are announced late November.

This accolade follows selection as a finalist in the 2012 Champion Canterbury Business Awards. The awards recognise smart providers of professional services that contribute towards creating a vibrant economy and are the largest regional business awards in New Zealand. We were a finalist in the keenly-contested Champion Professional Services in the Small Enterprise category.

To be recognised by one’s peers as being outstanding, and providing a key link to the success of other businesses, is a terrific acknowledgement.

These successes and others have contributed to our continuing growth. We are now a team of 16 with the recent arrival of Natalie Scott, the latest addition to our GIS team. We have also made a further two new appointments who will join the Abley team over the next couple of months. This will ensure that we can continue to offer a quality, professional service to our many clients throughout New Zealand.

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