

FEATURED PROJECTS : KAIKOURA WHARF DEVELOPMENT + INTEGRATED TRANSPORT ASSESSMENT GUIDANCE + RANGIORA MICRO-SIMULATION MODEL AWARD : ILAM RD 3D MODEL

STOP PRESS

A major earthquake struck Christchurch on 22nd February 2011 at 12.51pm. All our staff and their families are safe and well although our office premise has suffered damage.

We have quickly secured a spacious new office for our entire team and we will be fully operational soon. We are currently working remotely on client projects and our office

server is secure. Our team wants to sincerely thank all our clients and colleagues from around New Zealand and the world who have offered us words of support.

Our thoughts are with those that have been affected by this event. We hope you, your family and friends are safe.

A word with the Managing Director...

There is a 'perfect storm' brewing for transport planning in NZ. The conditions giving rise to this storm is the work behind the scenes developing the soon to be released updated National Infrastructure Plan, the new Government Policy Statement (GPS) on Land Transport Funding and the various proposals that will fall out of the discussion document from the Ministry for the Environment titled 'Building Competitive cities – Reform of the urban and infrastructure planning system'.



Steve Ahley
Managing Director



90TH ANNUAL MEETING OF THE TRANSPORTATION RESEARCH BOARD IN WASHINGTON

Our Stacy Rendall, who is currently studying for a PhD was invited to present at the 90th Annual Meeting of the Transportation Research Board held in Washington DC from the 23rd to the 27th of January 2011.

The programme covered all transportation modes and attracted policy makers, administrators, practitioners, researchers, and representatives of government, industry, and academia. The Meeting draws attendees from throughout the United States and from 65 countries. It is probably the single largest annual gathering of transportation practitioners and researchers in the world with over 10,000 attendees.

Stacy presented on 'Quantifying Transport Energy Resilience: Active Mode Accessibility', which covers his work on measuring the transport energy footprint of urban forms and understanding opportunities for increasing the resilience of residents to fuel price rises.

This perfect storm when coupled with other recent changes including the Resource Management Act and Local Government Act as well as new publications such as the NZTA Integrated Transport Assessment Guidance means there is significant change in our industry – and significant promise.

The changes to the transport planning landscape are providing new ways of doing things and new structures such as the creation of the Environmental Protection Authority (EPA). All in all I believe the Land Transport Management Act objectives will probably be easier to achieve as a result of these broad changes, which can only add to the certainty of decision making.

It is the issue of decision making and the previous lack of certainty within the planning and financial systems that make these changes necessary. It is my opinion NZ has often been hampered by a lack of certainty regarding 'where are we going' so some decisions were made in a vacuum of information. As an engineer, our training allows us to work

with problems where not all the information is available and to develop process and analysis techniques to fill information voids. This is where our firm can help.

Our firm's work over the last few months has been equally busy as those within the industry. Recent 'wins' include the publication of the NZTA Integrated Transport Assessment Guidelines that I mentioned earlier and our international 3D modelling award that we won in Tokyo, Japan .

This edition of Street Smart includes interesting news and lots more. A number of our staff are attending the Institute of Professional Engineers NZ (IPENZ) Transportation Group conference in Auckland in late March. If you are attending, the team and I look forward to seeing you there. If not then, enjoy.

FEATURE PROJECT : KAIKOURA WHARF DEVELOPMENT



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IN MARCH 2010, KAIKOURA WHARF DEVELOPMENTS LIMITED SOUGHT THE EXPERTISE OF ABLEY TO PREPARE AN INTEGRATED TRANSPORT ASSESSMENT TO ASSIST WITH A RESOURCE CONSENT APPLICATION FOR A MAJOR TOURIST DEVELOPMENT AT KAIKOURA WHARF.

The project involves establishing a hotel, restaurants, retail and potential tourist activities at the new wharf in Kaikoura.

Abley prepared an Integrated Transport Assessment for the proposal based on guidance recently published by the New Zealand Transport Agency. The assessment included an innovative methodology for forecasting the trip generation and parking demand of the proposal by modelling trips and

parking over a 24 hour period. This took into account that multi-purpose trips to the development are likely to occur, and that the different land uses will have different activity levels at different times of the day. Shared use of the available parking resource will also occur. The resulting parking demand is forecast to be significantly lower than applying the District Plan parking space requirements. In this case, over-providing car parking is not feasible in this location and is

also undesirable in terms of amenity and cost. Abley also assisted with development of the site layout plan to ensure all transport modes are adequately catered for including pedestrian and cycling links along the foreshore, and a coach drop off / pick up area directly adjacent to the wharf.

The resource consent application was submitted in February 2011.

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STAFF PROFILE : ANN-MARIE MULLIGAN



PRINCIPAL TRANSPORTATION ENGINEER BE(HONS) MIPENZ CPENG INTPE(NZ)

Ann-Marie is a Principal Transportation Engineer at Abley Transportation Consultants.

Ann-Marie joined

Abley Transportation Consultants at the beginning of 2010.

Recently, she successfully underwent competence assessment and is now a Chartered Professional Engineer and a Member of the Institute of Professional Engineers New Zealand (IPENZ).

Before coming to Abley she worked at AECOM in

Sydney, Australia, and prior to that she worked at Colin Buchanan in Bristol, UK for 3 years. She spent the first 2 years of her career with Beca in Tauranga.

Ann-Marie specialises in transport strategies, strategic and local transport planning, integrated transportation assessments, resource management issues, and the planning and design of public transport, walking and cycling networks and facilities.

Ann-Marie is currently managing the delivery of a number of interesting projects, including:

- The development of a parking management strategy for the Oamaru town centre for Waitaki District Council,
- A technical paper on transport to assist with development of a Commercial Strategy for the Christchurch City Council, and
- Transportation advice for a major hotel and entertainment development at Kaikoura Wharf.

Ann-Marie is a worldly traveller having been born in South Africa, emigrating to New Zealand as a child, gaining her First Class Bachelor of Engineering (Civil) degree at the University of Canterbury, and living in Australia and the UK for 3 years each before returning to Christchurch last year. Ann-Marie is engaged to Alex and they are finally getting married in 2011 after spending the last couple of years relishing the challenges of adventure racing and rogaining (cross-country navigation).

ARTICLE : ILAM ROAD 3D MODEL



ARTICULATING MAJOR CHANGES TO TRANSPORT NETWORKS AND HOW PEOPLE WILL INTERACT WITH THOSE NETWORKS CAN BE VERY CHALLENGING.

The Christchurch City Council is well aware of these challenges and to try and make the consultation process with the public and decision makers less demanding, Council commissioned Abley Transportation Consultants to develop a 3D model to describe the proposals on Ilam Road.

The Ilam Road project is intended to better integrate the road environment with the adjacent University of Canterbury. The Council has budgeted \$1.16 million over two years for this construction project.

The work Abley produced was particularly innovative

because it showed pedestrians, cyclists, buses and vehicles interacting with each other. The model was so innovative and creative Abley submitted it in an international 3D modelling competition being run in Tokyo, Japan. The Judges invited Steve to attend the competition at their cost to present the model. The model won an award that was accepted by Steve in Tokyo in front of 600 delegates from Asia, South America, Europe and the United States. The conference included presentations by Google, Mitsubishi, and world renowned academics including representatives from Harvard University.

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FEATURE PROJECT : RANGIORA MICRO-SIMULATION MODEL

Abley is always striving to provide services to our clients that will assist their business activities. The micro-simulation model developed for the Waimakariri District's main centre, Rangiora, is case in point.

Readers of our 'Spring 2010' newsletter would be aware of the Rangiora Town Centre 2020 (RTC 2020) strategy Abley has been helping Council prepare. The strategy seeks to create a more vibrant, community-orientated and economically robust Town Centre and to plan for and manage the effects of change. The adopted RTC 2020 strategy includes proposals for significant changes to the transport network in the Town

Centre and Council wanted to understand and quantify the impact of the changes.

Abley recommended Council invest in the development of a micro-simulation model. This tool would not only answer Council's questions about the RTC 2020 projects, but also provide Council with a better understanding of current and future pressures on the transport network. With an understanding of the 'useful life' of the existing transport network, Council can better manage its existing roading infrastructure through targeted transport infrastructure investments and by having a greater awareness of the implications of privately led development proposals.

manager, Paul Durdin, noted the largest challenge of the project was "to get the model to distribute traffic flows within Rangiora's grid-based network so that it accurately replicated observed traffic flows". The model has been formally peer reviewed by another consultant based in Auckland and deemed fit-for-purpose.

Testing of the RTC 2020 projects for the Town Centre is now complete and the results are ready to be shared with a wider audience than Council's project team. Being a micro-simulation model, it has the benefit of being able to transform highly technical concepts into a real-time visual representation of the modelled network that can be seen and understood by everyone.



The micro-simulation model of Rangiora is exceptionally complex, comprising around 72 km of road network, 44 zones and simulating over 26,000 vehicle movements within a four-hour period. Abley project

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ARTICLE : INTEGRATED TRANSPORT ASSESSMENT GUIDANCE

The New Zealand Transport Agency (NZTA) has published best practice national guidance for the preparation of transport assessments. Steve Abley, Paul Durdin and Malcolm Douglas of Douglass Consulting Services are the research authors and the work was done with the guidance of industry peers including Peter McCombs of Traffic Design Group, Bob Batty of Planit RW Batty and Associates and Stuart Woods of MWH.

The research was undertaken to develop national guidelines to improve transportation assessment practices because there is a general acknowledgement the assessment of transportation effects in New Zealand is undertaken with variable quality. The guidance proposes four levels of assessment – simple, moderate, broad and extensive – and includes the content at each level of assessment.

The guidance is a mandatory reference in the Auckland region when preparing an Integrated Transport Assessment because Plan Change 6 to the Regional Policy Statement in Appendix J states “...when preparing an integrated transport assessment regard shall be had to any Integrated Transport Assessment guidelines prepared nationally and regionally”. Abley Transportation Consultants is hopeful the guidance will be promoted by local authorities outside Auckland to improve the quality of transport assessments they receive in support of plan changes and resource consent applications.

Watch out for the next edition of the NZTA quarterly magazine “Research” where there will be a full article explaining the research outputs and usefulness.



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RECENT NEWS

TO FIND OUT MORE VISIT OUR WEBSITE www.abley.com/news

Steve Abley published in Institute of Directors Boardroom Newsletter
 16 February 2011

Stacy Rendall presented at the 90th Annual Meeting of the Transportation Research Board in Washington
 23rd January 2011

Proposed Change to Right Hand Give Way Rule Appointment
 13th January 2011

Kurt elected to ESRI GIS User Group Committee
 17th December 2010

Integrated Transport Assessment Guidance
 9th December 2010



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Professionalism Innovation Quality Relationships