A word with the Managing Director...

In transport terms it is now only a hop, skip and a jump until Christmas is upon us. Let me take this opportunity to wish you, your family and friends a very happy and Christmas and prosperous New Year.

Of course as the holiday season draws near we are also moving to the close of the 2011 road toll. This year is a record low for NZ and a massive reduction from our worst year of road death in 1973 where 843 people died on our roads. If we had maintained that shocking record we would have a road toll of about 1,200 dead this year, where as we will probably end up with a road toll of only about a fifth of that. That is an amazing level of improvement and goes to show what can happen if a team all pulls in the same direction.

New Zealand has made massive strides producing a road, education, licensing and enforcement system that is supported with world class vehicle engineering. Together these elements are combating more powerful cars, more congestion, and a more complex environment. Truly amazing and something as a profession we can be rightfully proud.

There is more to be done though and our firm is helping. Recently Abley has been heavily involved in the prediction of road safety crashes at intersections.

My fellow Director, Paul Durdin has been assisting the NZ Transport Agency to develop methods to highlight intersections that are abnormal from a road safety perspective i.e. a particular intersection either performs much better, or much worse than expected. Both findings are incredibly useful. One of the findings shows elements that need to be copied to other similar intersections, and the other shows elements that need to be rectified and corrected. The problem is, it is difficult to know where to look.

The good news is we have developed methodologies that reveal a new level of vision for road safety that has the potential to lower the road toll even further. If you are interested in learning more about these techniques Paul’s presentation to the Traffinz (Traffic Institute of NZ) Conference is a great summary, it is available here [link]. Also, look out for NZTA’s High Risk Intersections Guide that will shortly be published and includes some of our and the NZTA’s technical innovations. You may also like to have a look at how these techniques are applied, by having a look [here].

Even given NZ’s improving road safety record, there is still more to be achieved. In 1996, approximately 1,500 deaths per annum were attributed to diabetes and back then it was increasing at 2.3%p.a. In 1996 then, diabetes was 3 times a better killer of New Zealanders than road deaths. Given 30% of diagnosed diabetes is contributed through obesity, urban transport can form a vital part of increasing physical exercise as part of everyday activities. Therefore urban form is an important part of the road safety (and health) equation. It is this holistic road safety approach that our firm wants to lift the information veil on – we’re working on this at the moment, ask me more.

Again, I want to wish you a happy Christmas and prosperous New Year. If I don’t see you before, I look forward to seeing some of you at the Walking and Cycling conference in Hastings in March 2012.
In April 2011, Imperial Discount Liquor Limited, trading as Henry’s, sought the expertise of Abley to prepare an integrated transport assessment to assist with a resource consent application for a drive through liquor store. The project involves establishing a liquor store on a disused petrol station site on Yaldhurst Road in Christchurch.

Abley prepared an Integrated Transport Assessment for the proposal based on guidance recently published by the New Zealand Transport Agency (NZTA). A potential issue was that the site is located on a State Highway and any concerns the NZTA might have in their capacity as the road controlling authority. As the petrol station could re-instate on site as of right, the assessment of the effects of the proposed store were compared to those of a petrol station. This approach meant that the transport related effects of the proposal were insignificant as the liquor store would generate less vehicle trips overall than the petrol station. The result of our discussions with the NZTA during the preparation of the integrated transport assessment was that the NZTA did not consider the proposed activity would raise any transport related issues from an operational or safety perspective.

A further issue the existing site has are some areas of non-compliance with the Christchurch City Plan transport rules. Therefore Abley assisted with development of the site layout plan to minimise the effects of the non-compliances that could not be addressed. Our recommendations will ensure the site will operate as safe as possible for drivers and pedestrians.

In October 2011, the resource consent application was referred to a Hearings Panel to decide on whether the resource consent should be granted or not. Abley’s Paul Durdin was called into the Hearing as the expert transport witness in support of the proposals. Some quick calculations undertaken during the Hearing helped to reinforce the appropriateness of transport provisions in the scheme. We were pleased to recently find out that the Commissioner ruled in favour of the proposals and granted Resource Consent.

Northlands Mall has approximately 1800 car parking spaces spread on-site in the form of large car parking areas and multi-storey parking buildings. Recently, the mall has been experiencing increased parking demand for their premium parking spaces. As well as this, a newly established aquatic and recreation centre adjacent to the mall is likely to see non-mall customers attempting to use the mall’s car parks.

Abley were commissioned by Northlands to create a parking and way finding scheme to enhance the direction of customers to the nearest vacant parking space. The scheme that was proposed consisted of a series of variable message (VMS) and static signs to show the number of parking spaces available in the Mall’s most popular areas.

The VMS scheme was designed to count vehicles as they enter and exit different parking areas as well as counting the number of car parks occupied on each level within the two parking buildings. It was designed to encourage people to quickly find the nearest available space, increase efficiency, and reduce congestion and circulation.

Post implementation monitoring of the scheme has shown more parking spaces being occupied on upper levels as well as reduced congestion within car parking buildings. Abley Transportation Consultants are always dedicated to high quality deliverables and successful client outcomes and are happy to see another success such as that implemented at Northlands.
STAFF PROFILE: JARED WHITE

JARED WHITE

SENIOR TRANSPORTATION ENGINEER BE(Hons)

Jared joined Abley Transportation Consultants as a Senior Transportation Engineer in April this year. Recently, he joined the Canterbury and West Coast Branch IPENZ Transport Group Committee and is aiming to become a Chartered Professional Engineer in 2012.

Before coming to Abley he worked within the Development Team at Colin Buchanan in London, UK for nearly four years. Whilst there, Jared gained a high level of knowledge with the UK intersection modelling software namely LINSIG, TRANSYT, ARCADY and PICADY. Prior to moving to the UK he spent the first three years of his career with Gabites Porter in Christchurch working with TRACKS strategic modelling software.

Jared specialises in transport modelling based projects, development transport and preparing integrated transportation assessments and has developed a keen interest in traffic safety projects.

Jared is currently working on a variety of interesting projects, including:

- Preparing an integrated transport assessment for a Plan Change in Washdyke near Timaru;
- Assessing the implications of the right turn rule change for the Christchurch City Council and
- Safety audits for the Kaiapoi Town Centre redevelopment scheme.

Jared grew up in the sunny climes of Hawkes Bay and moved to Christchurch in pursuit of an Engineering (Civil) degree at the University of Canterbury. Jared has a passion for travel and his time in the UK provided an opportunity to visit the whole of Western Europe, Scandinavia and the Baltic States. He has travelled through South East Asia and on return to New Zealand late last year had the opportunity the travel overland through Africa from Cape Town to the Equator in Kenya. Camping in the Serengeti National Park amongst the wild animals was a major highlight. Returning to New Zealand will allow Jared to partake in the sporting and outdoor activities that he enjoys.


The research explores, to what extent, the NZHTS data can be used in a predictive context and describes a method that has been used to extract and arrange the NZHTS data into a form that allows practitioners to quickly undertake a range of enquiries based on user specified variables such as car ownership and household compositions to reveal area specific travel behaviours.

Through the course of this research several applications of the NZHTS data have been identified including, the development of a school trip generation model and household person trip generation models that provide a first cut estimate of person trip rates to a range of destination activities. The NZHTS data can also be used to profile travel movements by mode throughout the day enabling public transport service providers to plan services around times of peak demand and assisting TDM* measures to be directed towards specific road user groups. The findings of this report can also be used to test a lot of conventional wisdoms associated with travel behaviours.

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*New Zealand Household Travel Survey (NZHTS).  †Travel Demand Management (TDM)
ABLEY HAVE RECENTLY SETUP A GIS SERVER UTILISING ESRI’S ArcGIS SERVER TECHNOLOGY. MAJOR BENEFITS ARE ALREADY BEING ATTAINED FOR ABLEY’S INTERNAL MANAGEMENT OF GIS DATASETS AND RESOURCES, HOWEVER THE MOST EXCITING GAINS WILL BE PERTINENT FOR ABLEY’S CLIENTS.

ArcServer technology allows Abley to present the often varied, massive and numerous mapping outputs resultant from our projects to our clients within a web browser. With the advent of many interactive mapping sites on the internet it is a tool with which many in today’s workforces are familiar and at times reliant upon.

Abley are now able to use such technologies to alleviate issues in interrogating many complex spatial datasets giving practitioners of all levels access to the information they require at the click of a mouse. Abley’s accessibility mapping projects are a prime example where massive benefits will be gained. A typical full accessibility study to 8 key destinations across 4 travels modes results in 32 separate accessibility score maps. This results in at least 32 paper maps depending on the scale they are displayed at and the size of the region being modelled.

Abley’s new web mapping technologies will allow clients to view all these datasets at their desks. They will have the ability to turn each accessibility results layer on and off, view the underlying transport networks, view where all destinations are, change the base maps from aerial imagery to road networks and have the ability to zoom and pan to any region they need to interrogate the modelling results.

Kurt Janssen, our Senior GIS Analyst / Programmer has put together a demonstration web map using falsified data within the Wellington region. This site depicts a method of displaying outputs from Abley’s Intersection Safety modelling tools comparing predicted vs. realised intersection crashes based on numerous link attributes including speeds, number of lanes, flows and intersection type. This demonstration of web mapping technologies allows for many complex spatial layers to be displayed in one simple intuitive website in a flexible, informative and interactive manner enabling practitioners to spatially view data which is difficult to interrogate in any other form.