STREET SMART

abley transportation consultants

From the Front...

Director, Paul Durdin

The reduced road toll in 2011 was sustained through 2012, and 2013 looks to be on target for being the lowest road toll since 1952.

The way New Zealand now approaches road safety is undoubtedly a major contributing factor for this reversal in performance. Safer Journeys, New Zealand's Road Safety Strategy 2010-20, signified a departure from the traditional engineering, enforcement and education approaches to road safety. Safer Journeys promotes a holistic view of road safety that takes human fallibility and vulnerability into account. It aims for a more forgiving road system and the results are impressive.

With two thirds of the decade still in front of us there is still more to be done. Last month the High-Risk Intersections Guide and the draft Safer Journeys for Rural Schools Guide were both released. These new publications give me further confidence that deaths and serious injuries on the road transport system can continue to decline. Our firm is proud to have been involved in the preparation of both guides and we are now working with clients to improve road safety outcomes for their respective jurisdictions to drive the road toll lower.

Abley Contact: Paul Durdin
paul.durdin@abley.com
tel: +64 3 367 9004

IN THIS ISSUE...

CITYENGINE PROVIDES NEW VIEW

VISUAL FLYOVERS TO DEMONSTRATE THE IMPACTS OF LAND USE CHANGES ARE ONE OF THE BENEFITS OF ABLEY'S NEW ADVANCED 3D CITY MODELLING SERVICE.

CityEngine is a cutting-edge application that specialises in generating 3D urban environments, making it a powerful tool for planning and design projects.

Increasingly, public organisations are looking for innovative methods to demonstrate the impacts of land use change in formats that can be easily used, shared and understood.

Projecting and analysing the impact of district plan rules or a development proposal through a 3D graphical model is an example of how CityEngine meets these emerging requirements.

Using existing GIS parcel boundary information, CityEngine generates 3D building and street models of entire urban centres to show development potential incorporating conditions such as maximum building heights, setbacks and open space requirements. These rules can be changed 'on-the-fly' and outputs such as gross floor area, number of dwellings and building footprints re-generated.

Three dimensional models generated by CityEngine can be turned into visual 'flyovers' and published on the internet or integrated with 3D design and architectural software to generate more detailed building designs.

For individual development proposals, CityEngine can be used to analyse visibility and shadow impacts and identify views from individual building floors.

The technology underpinning CityEngine is a powerful tool for communicating the impacts of district plan rules and development proposals. It facilitates discussion and can greatly support the consultation and decision making processes.

Auckland Council has recently successfully used CityEngine software to create videos that demonstrate potential growth of 19 centres across the city over the next 10 to 30 years.

Abley Contact: Dale Harris
dale.harris@abley.com
tel: +64 3 367 9071

BEYOND NETWORK CAPACITY AND EFFICIENCY INDICATORS

THE ACTIVITY STATUS OF ANY RESOURCE OR SUBDIVISION CONSENT APPLICATION IS INFORMED BY ITS COMPLIANCE WITH RULES SET OUT IN A DISTRICT PLAN. FOR TRANSPORT, MOST DISTRICT PLANS PROVIDE COUNCILS WITH VARYING DEGREES OF DISCRETION TO CONSIDER THE ENVIRONMENTAL EFFECTS OF AN APPLICATION BEYOND ITS IMMEDIATE SITE.

Although the objectives and policies of transport strategies and plans, including District Plans, almost always explicitly identify the need to integrate land use and transport, often the focus of transport assessments tends to be on network capacity and efficiency issues. Indicators such as measures of vehicle congestion and increased journey times are common whereas other transport indicators such as road safety, accessibility, environmental sustainability, resilience or travel choice are usually not assessed, or if they are, they are not assessed correctly.

The focus on network capacity and efficiency issues may be driven by knowledge gaps when assessing these other transport indicators. Within the resource management context the use of well known indicators is likely to be magnified where there is a desire for clear thresholds as to the quantification of effects and the acceptability of those effects.

Network capacity and efficiency matters, for example, are generally well understood by the wider industry and many indicators exist to aide understanding by non-technical people, such as seconds of additional travel time and levels of service. By comparison, the wider industry understanding of different assessment methodologies and indicators for other transport indicators is variable and has generally been poorly communicated to non-technical audiences.

In our view, this has led to an imbalanced weighting being placed on network capacity and efficiency issues. We are seeking to redress this imbalance and improve the integration of land use and transport. We are developing assessment techniques and indicators for a range of transport matters that better consider a number of environmental variables.

In the road safety area we are helping Councils understand the safety performance of all roads in their network by mapping risk along corridors and at intersections. This is putting safety on an equal footing with network efficiency indicators because Councils can now understand in a 'level of service' sense, how specific elements in their network are performing.

Additionally, earlier this year the national methodology for measuring transport accessibility was published by the NZTA. Accessibility is a new area of study in New Zealand and one that we are leading in terms of assessing community enablement through the transport network to a number of opportunities including employment, health and education. We are working with various local and regional authorities to develop understandable indicators that will guide sound integrated land use and transport planning decisions.

We are also actively highlighting the importance of vehicle kilometres travelled (VKT). VKT is a headline indicator that infers a number of environmental variables such as time, pavement deterioration and air quality.

Good land use planning has a significant role to play when managing motorised travel. The mix of activities within a development and the extent to which a development is supportive of non-motorised travel are particularly important. Overall there are now a greater number of indicators providing a better understanding of land use and transport integration other than simply congestion and efficiency.

Together these newer indicators are providing decision makers with better information to holistically assess developments.

Abley Contact: Paul Durdin
paul.durdin@abley.com
tel: +64 3 367 9004

FEATURE PROJECT : OAMARU GETS NEW PAY AND DISPLAY MACHINES

CAR PARKING AND PARKING CHARGES CAN BE A CONTENTIOUS ISSUE WITHIN A COMMUNITY, BUT IN OAMARU THE WORK UNDERTAKEN BY ABLEY HELPED THE LOCAL COUNCIL SMOOTHLY TRANSITION TO NEW PAY AND DISPLAY METERS, WHICH THE LOCAL COMMUNITY "LOVES."

WAITAKI DISTRICT COUNCIL ROAD ASSET ENGINEER GARY WOOCK

A parking management study conducted by Abley in 2011 recommended replacing the old pay and display meters and funding the work by increasing charges as much as 100 percent.

On our advice, the council increased on-street charges from 60c an hour to $1 an hour, and off-street charges from 40c an hour to 80c an hour. Permit prices were also increased.

Abley also researched the parking hardware used by other local authorities in New Zealand. We found the most commonly used systems were single bay meters and pay-and-display.

The use of pay-by-space meters is increasing, with several systems being used in conjunction with in-ground sensors. A pay-by-plate system has been trialed by several local authorities but is not yet a commonly used system.

Abley recommended pay-and-display as the most practical solution for Oamaru, as the system is user friendly, particularly given the increasing elderly population. Drivers can also use the ticket for multiple spaces during the paid period. We also recommended that the council install meters capable of being upgraded to deliver a pay-by-space option.

The new meters were installed earlier this year and the council's Road Asset Manager, Gary Woock, says the local community "loves them" as they are easy to use and reliable, that is, you get a parking ticket out when you put the money in.

Gary was very pleased with the procurement process and found the provision of flexibility for future upgrades was effective in helping determine the best product for Oamaru. A credit card facility and TxT-a-Park has already been added to the system since their installation.

The machines, supplied by ITSL, have been operating for several months now and fit in well with the streetscape even though they aren't Steam Punk themed!

Abley Contact: Jeanette Ward
jeanette.ward@abley.com
tel: +64 3 367 9002

STAFF PROFILE : DALE HARRIS

TITLE: GIS ANALYST / TRANSPORTATION PLANNER
QUALIFICATIONS: BEM, MAPPLSC, PGDIPARTS (GIS)

Dale joined the Abley team as a GIS Analyst / transportation planner in November 2012.

Before joining Abley, Dale worked for five years at the Christchurch City Council as a policy planner, working on a range of strategic projects including plan changes, area plans and earthquake recovery master plans.

It was while carrying out this work, using GIS to support analyses of a range of land use planning projects that she decided she wanted to specialise in this area.

Over the past nine months Dale has been involved in a range of GIS projects, mostly for local and central government organisations. Some of the key projects she has worked on include building a utilities portable mapping application for a district council, processing GPS travel time surveys and analysing urban road safety risk.

Dale's planning background means she still gets involved in transport research and policy projects that the company is involved in such as an NZTA research project identifying how emerging digital data can be used to assess the efficiency of the State Highway network. This work has included the development of a GIS-based report tool.

Dale's blend of GIS and planning skills gives her a unique insight into GIS-related land use, streetscape and transport planning projects.

Since working for Abley, Dale has learnt about new software including CityEngine (also discussed in this newsletter), developed her programming skills and helped to develop new and innovative techniques to solve clients' problems.

Outside work, Dale has a passion for the outdoors, tramping, four-wheel driving and shooting, although with a young family, she doesn't get out in the wild as much as she would like!

Abley Contact: Dale Harris
dale.harris@abley.com
tel: +64 3 367 9071

FEATURE PROJECT : KAIAPOI GETS A 'SHARED SPACE' STREET

THE PROJECT TEAM BUSY AT A DESIGN WORKSHOP

ABLEY IS PROUD TO BE INVOLVED IN THE DESIGN OF A SHARED SPACE STREET IN KAIAPOI TO COMPLEMENT A NEW FACILITY UNDER CONSTRUCTION THAT WILL INCORPORATE THE LOCAL LIBRARY, SERVICE CENTRE AND MUSEUM.

As part of the post-earthquake rebuild project, the Waimakariri District Council has taken the opportunity to reconsider the design of Raven Quay, which sits between the new facility and the Kaiapoi River.

Jeanette Ward led the development of concepts for the street design working closely with architects, landscape architects, civil designers and council staff.

The project team concluded that a one-way shared space street would best meet the objectives. The Kaiapoi Community Board agreed that one-way flow offered the best use of the space. It also supported the shared space concept as it would better integrate the building and the streetscape.

The concept was further developed at a series of design workshops, giving Jeanette an opportunity to build on experience gained from her visit to the Auckland shared space streets and Exhibition Road in London.

The shared space consists of a trafficable zone adjacent to the river stop bank, an accessible zone adjacent to the new building and an activity zone between the trafficable and accessible zones.

Jeanette consulted with the Waimakariri Access Group, Royal New Zealand Foundation of the Blind and the NZ Police to ensure the design catered for all users and considered Crime Prevention through Environmental Design (CPTED) issues.

The building is currently under construction and the entire project, including the new street, is expected to be completed by mid-2014.

Client Contact: Joanne McBride
Abley Contact: Jeanette Ward
jeanette.ward@abley.com
tel: +64 3 367 9002

RECENT NEWS

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

Seeking Office Assistant
29 August 2013

Natalie Scott Awarded Canterbury Earthquake Citation
28 August 2013

Peter Cockrem Judges our Engineers of Tomorrow
27 August 2013

Takumi Ledbetter Stars in Canterbury Red Devils National Final
26 August 2013

Abley Sponsors Bike Stand Design Competition
19 August 2013

ABLEY TRANSPORTATION CONSULTANTS

- Integrated Transport Assessments
- Expert Witness
- Transport Modelling
- Policy and Strategy
- Accessibility Modelling
- Geographical Information Systems
- Road Safety
- Active Transport
- Parking Studies
- Public Transport Planning
- Streetscape Design
- Transport Energy Systems

ACENZ

www.abley.com info@abley.com

Christchurch, Level 1 and 2, 30a Carlyle Street
phone +64(0)3 377 4703 fax +64(0)3 377 4700
PO Box 25350, Christchurch 8144, New Zealand

Auckland
phone +64(0)9 974 9820 fax +64(0)9 974 9824
PO Box 911336, Auckland 1142, New Zealand

Queenstown
phone +64(0)3 974 4569

Nichola Blue
Address line 1
Address line 2
Address line 3
Address line 4

abley transportation consultants