

INFRASTRUCTURE UPDATE

An Occasional Newsletter from the National Infrastructure Unit

Issue #6 May 2013

Welcome to the latest *Infrastructure Update*, the occasional newsletter from the National Infrastructure Unit. As we discussed in the last issue, our focus for this year is on a number of workstreams and activities that together, build the evidence base on how we are placed against achieving the outcomes of the Plan and the priorities for future action and investment. Key workstreams that contribute to this are the performance indicators, trends/scenario modelling, resilience and the first Capital Intentions Plan. We will pull all of these together into a publication in January next year that “takes stock” and tells the story of the evidence. This will facilitate discussions over the course of next year on refining this story and developing an agreed and prioritised response – an action plan of where, when and how.

Next month is an important step along this journey with the workshops on trends/scenario modelling and we invite everyone interested in exploring what the future pressures or demands on our national infrastructure may be to come along. The workshops will be led by members of the National Infrastructure Advisory Board. Key workshop details are below and further information is over the page – hope to see you there!

Elsewhere in this issue of *Infrastructure Update* there is an update on the PPP programme, a thought piece from MWH on the Economic Network Plan successfully employed in Southland and a report on tsunami related research being undertaken by Auckland University. We cover a few updates on recent discussion documents and where things are at and profile a couple of interesting reports released recently, including the Local Government Efficiency Expert Advisory Group, the Productivity Commission report into Local Government Regulation and the Regional Economic Activity Report.

Thank you for your continued support for the Plan and as always, your feedback is most welcome.

National Infrastructure Unit

Trends and Scenarios – seven regional workshops

We are holding open invitation workshops for all those interested to come along and discuss what you see as the key trends affecting infrastructure in New Zealand over the next 30 years. Further information on the workshops is over the page but the key details are below and there is more on our website at www.infrastructure.govt.nz/plan/2011implementation including suggestions for background/pre-reading.

The workshops will finish with afternoon tea so for catering purposes, please RSVP if you are planning to attend – RSVPs can be made to: info@infrastructure.govt.nz or Carrie Cooke, phone 04 890 7278 or e-mail carrie.cooke@treasury.govt.nz

LOCATION	DATE	VENUE	TIME
Dunedin	11 June	Cargills Hotel, 678 George Street	All workshops are: 1:30 – 4pm
Christchurch	12 June	Airforce Museum, 45 Harvard Ave, Wigram	
Napier	14 June	East Pier, Hardinge Road, Ahuriri	
Auckland	18 June	Auckland Policy Office, Level 6, 45 Queen St	
Hamilton	19 June	The Green Space, 60 Te Aroha St	
New Plymouth	20 June	Hotel Grand Central, 42 Powerderham Street	
Wellington	21 June	Meetings on the Terrace, 152 The Terrace	

NIU website and mailing list

Keep an eye on the NIU website for our latest papers, presentations or reports:

www.infrastructure.govt.nz

To provide feedback or to be added to the mailing list for this newsletter and other publications, please send us an e-mail at:

info@infrastructure.govt.nz

Collaboration is a key principle of the Plan and we are regularly around the country working with and talking to the infrastructure sector. Please contact us if you would like to share your thoughts and ideas.

INFRASTRUCTURE UPDATE

Trends and scenario – regional workshops

The National Infrastructure Advisory Board and NIU invite you to a workshop to consider future trends and scenarios for infrastructure in New Zealand.

The workshops are part of the development of the next National Infrastructure Plan. This has promised to deliver a more robust evidence base of future demand and current performance, in order to mature the debate on future needs and responses. It is also intended to be a more collective infrastructure plan across the public, private and local government sectors.

In order to deliver these aims, the NIU is developing a set of performance indicators to assess the current state of NZ infrastructure, and a set of scenarios to help us understand future pressures on this infrastructure.



To create these scenarios, based on the mega trend work NZTA completed (about to be posted on the [NZTA website at www.nzta.govt.nz](http://www.nzta.govt.nz)), NIU has identified the major trends that will affect infrastructure in New Zealand over the next 20-30 years, and now we want to discuss these with industry to build the scenarios that collectively we think should be considered by key decision makers.

To start this discussion, NIU is holding seven regional workshops across NZ. These will have two parts:

- ▶ In the first half of the workshop, we will be asking you whether you think we have captured the right trends and whether we have missed any?
- ▶ The second half of the workshop will then be spent considering what cross-sector scenarios we should build if we assume the trends will occur. NIU is looking to create three or four main scenarios that seem probable given the trends identified, and that we would want key decisions makers to understand when making long term investment decisions. The scenarios should be cross sector, with the real benefit of them being identifying the interdependencies and relationships between infrastructure sectors?

The workshops will finish with afternoon tea so for catering purposes, [please RSVP if you are planning to attend](#) – RSVPs can be made to: info@infrastructure.govt.nz or Carrie Cooke, phone 04 890 7278 or e-mail carrie.cooke@treasury.govt.nz

LOCATION	DATE	VENUE	TIME
Dunedin	11 June	Cargills Hotel, 678 George Street	All workshops are: 1:30 – 4pm
Christchurch	12 June	Airforce Museum, 45 Harvard Ave, Wigram	
Napier	14 June	East Pier, Hardinge Road, Ahuriri	
Auckland	18 June	Auckland Policy Office, Level 6, 45 Queen St	
Hamilton	19 June	The Green Space, 60 Te Aroha St	
New Plymouth	20 June	Hotel Grand Central, 42 Powerderham Street	
Wellington	21 June	Meetings on the Terrace, 152 The Terrace	

The continued movement of NZ population away from rural areas will likely lead to further under-utilisation of assets in rural areas, and increased pressure on assets in urban areas, especially Auckland.

National Infrastructure Advisory Board

April meeting

The National Infrastructure Advisory Board met in April to review the initial story from the performance indicators workstream, followed by a discussion with six Ministers responsible for different infrastructure portfolios. The meeting with Ministers was chaired by Hon Bill English, Minister of Finance, and was a wide ranging discussion covering the Plan, demand management, planning legislation, the first Capital Intentions Plan and water infrastructure.

Next meeting

The Board next meets on 28 June and will be focussing on social infrastructure and overall capital asset management – both the allocation and procurement of new investment and the better utilisation of existing assets.

About the Board

The National Infrastructure Advisory Board was set up in 2009 to advise the NIU and the Minister of Finance (incorporating Infrastructure).

The Board provides both the Minister and the NIU with advice and perspectives on infrastructure project appraisal, capital asset management issues and the development of the National Infrastructure Plan.

The Board is scheduled to meet 5 times this year – March, April, June, August and October.

Members and contact

The Board is chaired by Dr Rod Carr. Others members are: Lindsay Crossen, Margaret Devlin, Kathryn Edmonds, Edward Guy, Dr Terence Heiler and John Rae.

The Board can be contacted via the NIU e-mail at:

info@infrastructure.govt.nz

PPP update

The Transmission Gully PPP procurement continues on schedule and a number of projects potential projects are progressing.

The Treasury is currently revising the PPP Standard Contract and aims to publish it on the National Infrastructure Unit website later in the year. The next version will incorporate lessons and developments from the two pathfinder projects.

The Inland Revenue Department is undertaking a public ruling on the tax implications of the revised PPP Standard Contract. The consultation period has now closed and the public ruling, which is anticipated to be published in the next few months, will provide both government agencies and private sector investors a greater level of certainty over the tax treatment of the PPP Standard Contract.

The first two 'pathfinder' projects are well underway with the Hobsonville Point primary school opening earlier this year and the secondary school on target to open next year. Construction is continuing on Wiri prison and it is targeted to open in 2015. The Department of Corrections has published a 'lessons learned' report from its Wiri prison project. The report contains many useful insights for procuring entities and bidders alike (a copy of the report is located at www.corrections.govt.nz/_data/assets/pdf_file/0009/640593/PPP-Lessons-Learned-FINAL_11Dec2012.pdf).

Transmission Gully PPP

Procurement of the Transmission Gully highway continues to schedule. On 15 April the New Zealand Transport Agency (NZTA) announced the shortlisted consortiums that will proceed to the next phase of the tendering process. The two consortiums – Wellington Gateway Partnership and Positive Connection – who received the RFP for the project in early May are made up of New Zealand-based and international organisations. Following evaluation of proposals, an announcement of the preferred bidder for the project is expected in the first quarter of 2014.

Transmission Gully will be the first roading PPP and is being progressed by the NZTA. Procuring Transmission Gully as a PPP will allow the NZTA to move ahead with certainty to begin construction of the project in 2014 and open the road by 2020. Under the PPP, the private sector contractor will receive its revenue from NZTA as a performance-based fee for making the road available and achieving certain outcomes, not through the collection of tolls as in some other jurisdictions.

Auckland Prison Project – Department of Corrections

The Department of Corrections is currently investigating options for refurbishing or replacing a maximum security facility located in Auckland (Auckland East facility). The facility, built in the 1960s, currently houses approximately 260 beds and is the Department's only dedicated maximum security facility. A PPP approach may be used to deliver design, construction, finance and some related services for the project.

Cabinet is expected to decide which investment option will be pursued and how it will be procured in the second half of 2013.

New Schools – Ministry of Education

The Ministry of Education is investigating a number of potential new school projects located in Christchurch, Auckland, Queenstown/Wakatipu, Hamilton and elsewhere in the North Island.

The potential pipeline contains up to 30 new school and relocation projects between now and 2020. Not all projects will be suitable for PPP procurement so the Ministry is investigating which potential new schools could be bundled together and which bundles could be procured as a PPP. A Cabinet decision on new school procurement is expected in the second half of 2013.

Update on improving oil security

On 30 October 2012, the Ministry of Business, Innovation and Employment released for public consultation a discussion paper that investigated a range of proposals to improve oil security in New Zealand. Fifteen submissions were received, and these are available at:

<http://www.med.govt.nz/sectors-industries/energy/energy-security/oil-security/oil-security-review-2012/submissions>

Once the submissions have been fully considered, the Ministry will provide recommendations to Ministers on next steps.

Crown-owned company to invest in irrigation infrastructure

Cabinet agreed in December 2012 that a Crown-owned company should be established to support Crown investments in regional irrigation schemes - an initial capital allowance of \$80 million to facilitate this investment has been provided in the Budget 2013.

The proposed company will be an equity investor, investing in regional irrigation schemes that will be initiated by the private sector and will have private sector co-investors. The schemes must be commercially viable, technically feasible and have the required resource consent before obtaining Crown investments.

The Crown will have no more than 49 percent share in each scheme, preferably a lot less. The Crown will be a short term investor in each of the schemes, to assist the schemes through their initial risk period when water uptake by farmers will be below optimum. It will seek to exit a scheme when it becomes commercially viable. An Establishment Board has been appointed to establish this company which will commence operating from 1 July 2013.

Other projects

There are a number of other projects that may involve a PPP which are currently being investigated through business case processes. These are:

- ▶ Other Roads of National Significance – assessment of further transport projects including the Puhoi-Warkworth section of the Puhoi-Wellsford Road of National Significance.
- ▶ Christchurch Convention Centre Precinct - CERA are continuing the development of the detailed business case.
- ▶ Counties Manukau Health Park – an indicative business case is being developed by the DHB.

Recognising the wider focus on innovation and delivering outcomes, the PPP Team is working with agencies to scope a number of other opportunities, including with local councils and in the social housing sector generally.

Progress on Development Contributions



The Development Contributions Review Discussion Paper was released on 10 February 2013 with submissions closing on 15 March 2013. The Department of Internal Affairs received 129 submissions. Submissions were received in equal parts from:

- ▶ local authorities
- ▶ companies, iwi, individuals and organisations with land development interests, and
- ▶ community groups, lawyers, institutions and professional associations.

Over 58 percent of submitters were in favour of retaining development contributions, while less than a fifth (19 per cent) were opposed. Most submitters agreed that improvements could be made to the development contributions regime however, there was strong support for updating and enhancing guidance and training on development contributions. The options for change that received the most support from submitters were:

- ▶ consolidating and clarifying existing development contribution provisions
- ▶ an independent, transparent dispute resolution mechanism
- ▶ facilitating greater provision of private infrastructure through developer agreements
- ▶ narrowing and clarifying the range of infrastructure that development contributions can be charged for, and
- ▶ providing greater direction on the purpose of development contributions and principles to be applied in their use.

The Department of Internal Affairs is currently working on refining options and undertaking **targeted** consultation in preparation for a report back to Cabinet and policy decisions in the middle of 2013.

UFB and RBI progress

The latest quarterly report on the Government's Ultra-Fast Broadband and Rural Broadband programmes shows good progress was made in the first three months of this year.

The report released by Communications and Information Technology Minister Amy Adams on 9 May 2013 shows

- ▶ nearly 1500 schools are able to access the UFB network.
- ▶ 26 of the most remote schools in New Zealand now have access to broadband capable of peak speeds of at least 10 megabits per second, which is about four times faster than previous services.
- ▶ fibre was rolled out to more than 36,000 end users across New Zealand during the first three months of this year. The total number of homes and businesses that can now connect to the UFB network to more than 171,000.
- ▶ more than 100,000 rural households are now able to connect to improved wireless broadband through Vodafone under the RBI, and more than 42,000 users have access to better fixed-line broadband through Chorus.
- ▶ six new towers have been installed so far this year by Vodafone in Manawatu-Wanganui, Southland, Grey District, Westland, Northland and the Wairarapa.
- ▶ Vodafone also upgraded 14 towers, and Chorus upgraded 77 roadside cabinets with fibre during the first three months of the year. To date, there have been 36 new towers installed and 145 upgraded, and 407 cabinets upgraded.

INFRASTRUCTURE UPDATE

Report of the Local Government Infrastructure Efficiency Expert Advisory Group

The Local Government Infrastructure Efficiency Expert Advisory Group (EAG) was established by the Minister of Local Government in late 2012. The terms of reference focussed on how to deliver in the most cost-effective manner good quality local government infrastructure to support a growing economy. The EAG considered opportunities and barriers in terms of infrastructure costs, relevant legislation, and decision-making processes. The EAG reported to the Minister for Local Government in March. Summary extracts and points from the report are reproduced below with a full copy of the report available at: <http://www.dia.govt.nz/Better-Local-Government#g>

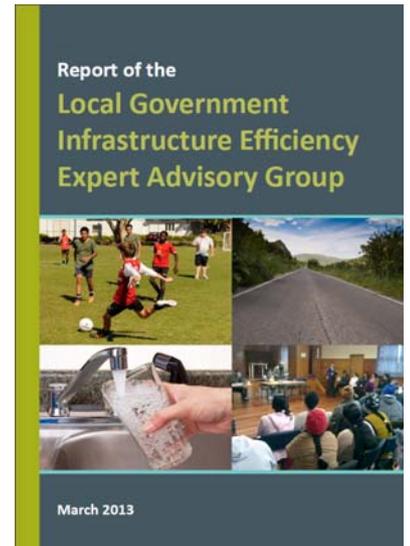
The report notes that expenditure on infrastructure over the period 2013-2022 is projected to be \$111.1 billion (\$30 billion in capital expenditure and \$81.1 billion in operational expenditure), a large proportion of which will be in Auckland. Local government is the second largest owner of assets in New Zealand – behind central government. In 2011, councils are estimated to have owned fixed assets valued at \$94 billion (up from \$70 billion in 2006).

The report makes 63 recommendations. These range from improving the coordination of the policy environment at the more generic level, to improving the ways in which councils manage the delivery of infrastructure. There are specific recommendations about funding, monitoring and governance mechanisms

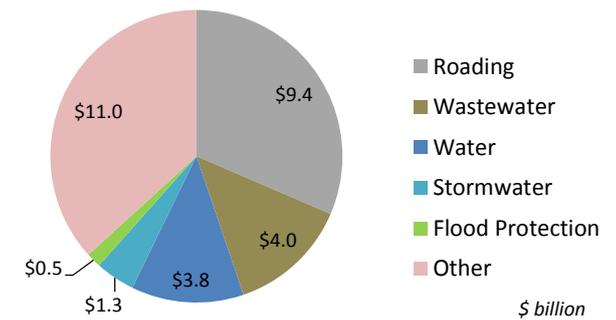
Discussion and recommendations in the report are grouped under the headings of:

- ▶ What is driving change? - The EAG considered a range of matters that may be influencing or driving change in the current and future provision of council infrastructure. Population growth, decline and structural change are considered to be key drivers, as are economic trends while ageing infrastructure may be an issue and resilience is seen as relevant along with rising community expectations. Trends in technology are seen offering some solutions. All of these drivers and trends are overlain by the issue of affordability, which is particularly significant in light of lower economic growth and demographic trends.
- ▶ The formal framework within which local government delivers infrastructure - the EAG identifies the most significant recommendation in this area is that spatial planning (similar to the Auckland model) should be mandated for use elsewhere in New Zealand. The EAG considers that this one action would have the greatest beneficial impact; the formation of the Auckland Council has lifted the bar in terms of infrastructure planning and delivery. The EAG also gave particular attention to the complex provisions of the water framework (water supply, wastewater disposal and stormwater drainage).
- ▶ Business practice issues - The EAG identified compelling reasons to introduce more direct charging for provision of council infrastructure services. These include demand management, accountability and increased flexibility in funding and procurement. Recommendations are made about the use of volumetric charging for water and the examination of pricing mechanisms for roads.
- ▶ Institutional Issues - Greater transparency, reporting and benchmarking of performance was should be introduced for council infrastructure activities. Accountability and decision making need to be supported by understandable and consistent disclosure and benchmarking regimes, linked to the long term plan system. Performance data and measures for financial and non-financial elements (such as levels of service) need to be clear, understandable and standardised so they are comparable between different councils.
- ▶ Size and scale - A recurring theme is around the difficulties and cost for small councils in maintaining infrastructure expertise. Apart from better business practices, consolidation is suggested as a way of addressing the issue. Greater use of infrastructure delivery at a regional scale will facilitate substantial benefits where the assets being managed are also at that scale. For significant capital expenditure, scale can provide the specialist skills needed to manage scope, procurement, timing, financing and operational issues.

The members of the EAG were Fran Wilde (Chair), Elizabeth Anderson, Alan Bickers, Philip Cory-Wright, Josephine Grierson, Stephen Selwood and Jeremy Sole.



10 year forecast CAPEX by activity (real \$)



INFRASTRUCTURE UPDATE

Resilience of the New Zealand Port Network to Natural Hazards

Report provided by Dr. Liam Wotherspoon, EQC Research Fellow in Earthquake Engineering, Dept. of Civil and Environmental Engineering, The University of Auckland.

Ports are vital components of the economy, with up to 99% of all exports and imports by volume being transferred through New Zealand ports (New Zealand Trade and Enterprise, 2010). Further to their economic importance, the Civil Defence Emergency Management Act (2002) has identified ports as lifelines that need to be in operation following a natural hazard event.

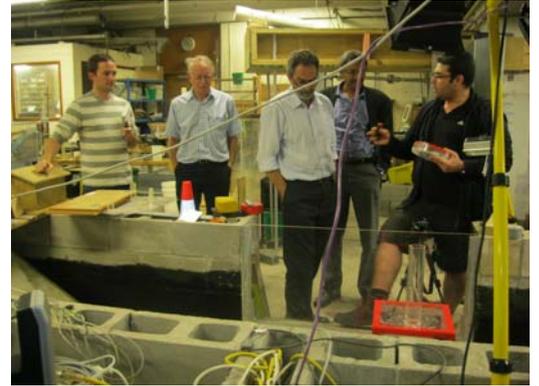
These key factors are the main motivation behind a collaborative research program being led by the University of Auckland entitled "Resilience of the New Zealand Port Network to Natural Hazards". This research program looks at the component level, investigating individual pieces of port infrastructure and the effect of a range of natural hazards. This information is used to inform macro level studies, both at the individual facility level and of the port network as a whole.

The first stage of this research was the characterisation of New Zealand port infrastructure. The main port facilities across New Zealand were approached, and following their buy-in a suite of port infrastructure typologies representative of New Zealand characteristics were developed. These typologies are used as input into the development of fragility models that provide a representation of the performance of each infrastructure component to varying levels of natural hazard severity in terms of damage states, downtime and economic impact.

Using a combination of fragility models to represent the infrastructure components, the performance of an overall port facility can then be investigated. Moving from individual facilities, the aim is to carry out research into the performance of the New Zealand port network as a whole, and how natural hazard events may influence the functionality of individual ports and the ability of the overall port and transportation network to respond to these impacts.

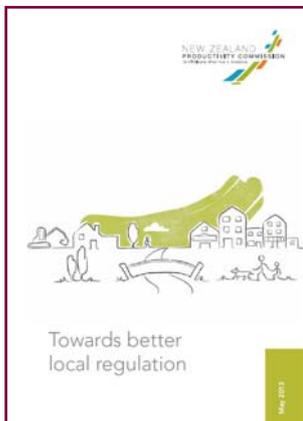
This research program is currently in the initial stages, with the main focus the performance of wharf structures under seismic and tsunami loading.

Research into tsunami generated currents in port and harbours is also underway in collaboration with GNS Science, eCoast Ltd, and Mulgor Consulting. These projects are funded by the Natural Hazard Research Platform.



Local Government Regulation – Productivity Commission

The Commission was asked to identify opportunities to improve the regulatory performance of local government. This includes regulation-making processes, appropriate principles for the allocation of regulatory roles between central and local government, and better ways to assess councils' regulatory performance.



The Productivity Commission released its Final Report in May 2013, containing 29 recommendations. The Commission's recommendations can be grouped into three key themes:

- ▶ Setting the 'rules of the game': These recommendations focus on ensuring that central and local government have a common understanding of each other's roles, duties and accountabilities. To promote this, the Commission recommends the development of a central/local government protocol to agree a set of principles to govern the development of regulations affecting the local government sector.
- ▶ Strengthening institutions: A number of recommendations focus on strengthening the institutions involved in the development, implementation and enforcement of local regulations. Here the Commission raises the need to closely examine existing institutions and suggests that new institutional arrangements may be required to help manage the interaction between central and local government and drive improvements in the regulatory system.

- ▶ A forward work programme: The final group of recommendations provides a work programme to put into practice improvements to the regulatory system. These include measures to strengthen current performance reporting and ways to improve quality assurance processes within both central and local government.

A copy of the report is available at: <http://www.productivity.govt.nz/inquiry-content/1510?stage=4>

INFRASTRUCTURE UPDATE

Regional Economic Activity Report - 2013

For the first time, the report makes available in one place the available economic data on all of our regions. It provides another dimension to the evidence supporting the Government's Business Growth Agenda as well as improving decisions that affect local economies.

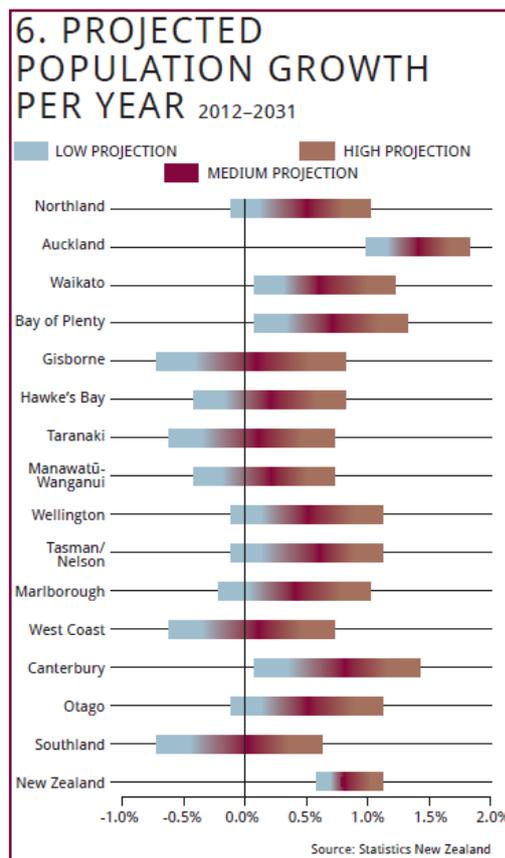
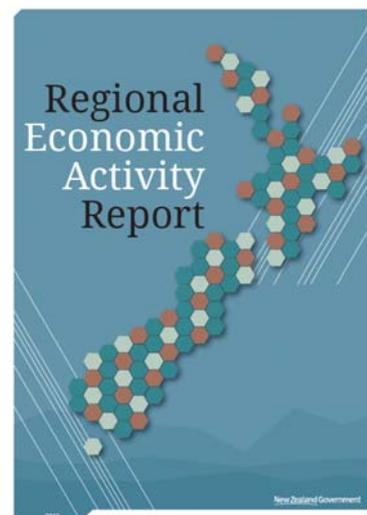
In his foreword to the report, Minister Joyce says that "his report is designed to encourage more debate about what it takes for a region to be successful, and to more clearly link the decisions that are made by local stakeholders about resource allocation and usage, for example, to the number of jobs available in a region. I expect stakeholders will want to use it to compare and contrast the economic fortunes of different regions around the country, and ask themselves what lessons and opportunities there are for growth and jobs in their region."

For those thinking about future demands on infrastructure, the report provides a useful source of information, while highlighting a number of realities that reinforce the importance of infrastructure to our economy.

Of particular interest from a Plan perspective are the following extracts or points from the report:

- ▶ 72 percent of the population live in 16 main urban areas (centres with 30,000 or more people) with our rural population little bigger than it was a century ago.
- ▶ The variability and unevenness of projected population growth across the regions with Auckland likely to account for 60 percent of national population growth to 2031. While most other regions will see modest growth, population levels will be static in a few regions.
- ▶ A significant proportion of New Zealand's exports are generated from our rural areas. At the same time, most of our economic activity is undertaken in urban areas, and this is increasing.
- ▶ The importance of having good freight connections across New Zealand is highlighted with primary product generated in one region often sent to major processing plants, storage facilities and ports located in other regions.
- ▶ There are, however, natural limits to increasing economic returns through land conversions and to expanding agricultural production in general without significant infrastructure investment and innovation.
- ▶ Auckland and Tauranga Ports carry most of New Zealand's merchandise cargo by value, followed by the Lyttelton Port and Port Chalmers. Tauranga, Lyttelton and Port Chalmers tend to carry export staples such as dairy, meat and forestry products, while the Auckland international airport carries most of New Zealand's high-value export cargo. The Auckland sea port brings in most of New Zealand's imports,
- ▶ The ports where commodities exit New Zealand provide a partial indicator of where they originate from. Often goods travel great distances across New Zealand before they leave via a port.
- ▶ The proportion of the workforce in each region that is employed in export-related sectors is highest in Tasman, Marlborough, Southland, Gisborne and the Hawke's Bay. These regions have high proportions of employment in primary industries such as horticulture.
- ▶ In absolute dollar terms, Auckland, Otago, Canterbury and Wellington receive large doses of international spending. Relative to total household income of the region, international tourism is most integral to Otago, the West Coast, Tasman and Marlborough.

A copy of the report is available at: <http://www.mbie.govt.nz/what-we-do/business-growth-agenda/regions>



INFRASTRUCTURE UPDATE

Telling the infrastructure story

A think-piece provided by Anthony Byett, Senior Economist, and Andrew Maughan, Senior Consultant – MWH Global



Apparently our minds are predisposed towards finding patterns and making connections. Of course, there is also a tendency towards selective bias, choosing what we want to see and ignoring the rest. Connecting McKinsey's *Saving \$1 trillion a year* and Haydn Read's *Sophisticated analytics* articles from the previous *Infrastructure Update* show the first heuristic has been more at play than the second.

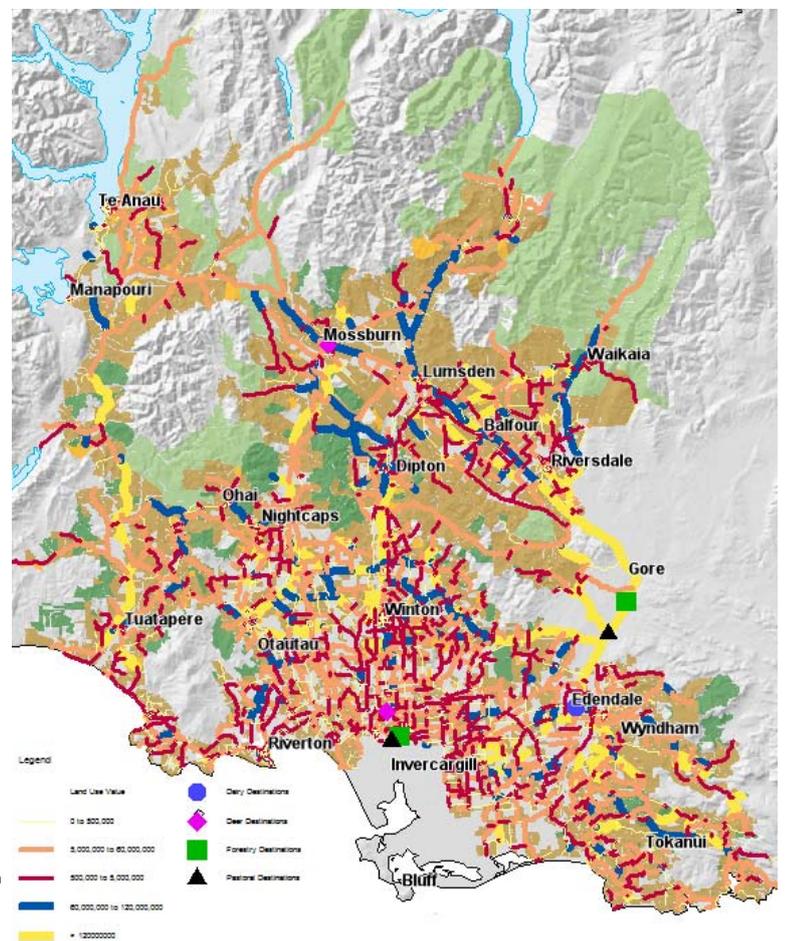
Both brought to mind the Economic Network Plan (ENP) that has been so successfully employed in Southland. The ENP is a decision making tool. It takes data available on assets – roads in this case – and builds a Maslow-type hierarchal linkage through to purpose.

The headline may not be as catching as, "\$1 trillion a year," but the ENP methodology could conceivably save in excess of \$150 million a year on New Zealand's road operating expenditure. The application is an example of the "uncommon application of common knowledge" to which Haydn referred. The data are readily available but there is a need to focus on the decision. Possibly the thrust of both April 2013 Update articles was in alignment with this; that there is the opportunity to bring together the data that does exist to make more informed decisions around infrastructure – just spending more money is not the solution.

Bruce Richards, Regional Manager Planning & Investment Southern, provides a succinct overview of ENP: "ENP is a tool that can take data inputs, run scenarios of future infrastructure demand, and advise as to what a network will require to be, to deliver a fit for purpose solution that is optimised to be a value for money investment based on well considered evidence. It is ideal for investment confidence."

In the Southland example, spending more money was simply not an option. Their community cannot afford the forecast increase in expenditure to renew the legacy of assets inherited from decades earlier. Joe Bourque, Strategic Transport Manager, Southland District Council comments, "it was paramount to keep as much income momentum as possible that would on-flow support to the other well-beings. Council decided a 'Network Investment Engine' would be the best tool to impartially and accurately determine where the money would best be invested. We found that this approach gave us a way to identify which roads of the network were underutilised and over-served, or fit for purpose, or over-utilised and under served. We now have a strategy that we can literally show to people. We have a workable solution that is gaining wide acceptance."

The Southland example was a case of using relatively simple techniques to establish an understanding of the basic need for a road and taking four key steps to deliver a powerful set of information.



First, it was an application of the adage, "you can't manage what you don't measure" – how many times do we fail to measure what it is we actually want from our assets? It is not just about the number of vehicles passing along a road but is the road fulfilling purpose? For Southland a primary need was getting export goods to market; for Queenstown, primary needs revolve around tourism. As Erik Barnes, GM Infrastructure Services, Queenstown Lakes District explains: "we need to understand the value of our roads in terms of the movement of tourists and goods that support tourism. The District is not only an importer of tourist dollars but we are also a key launching point for exporting tourists to other parts of the South Island and wider New Zealand. We need to understand where, when and how much we invest in our roads against the economic and social value of the road, not just from an engineering perspective". In the cities the emphasis shifts to employment and learning. In all cases there are also the higher level needs such as safety, social, cultural and environmental, but the principle applied is the same: how do we deliver the best outcome for the lowest cost?

INFRASTRUCTURE UPDATE

The second step was to focus on the decision. This was not an exercise in data collection. It was not an exercise in building a fit-for-all transport model. It was about taking the data available and thinking through how these data inform our choices, an approach encouraged by Dave Brash, General Manager Planning & Investment, NZTA: "The ENP is consistent with sound asset management practice. It makes good sense as a tool to help inform those hard investment decisions and we are encouraging other councils to adapt it to their situation".

The third powerful step comes from comparing outcomes to costs. We may believe that we have delivered an efficient investment because costs have been contained, or even reduced, but a true measure of efficiency revolves around matching spending to needs.

And last, we, the community, need to make a decision. **Communication – the fourth step** – is the key to good collective decisions. Today, we can take advantage of our ready recognition of patterns. A series of maps can be created to enable the logic of hierarchical needs to be explained, considered and debated. What does the community need? If we can afford that - and only then - what else does the community want, and are they willing or able to pay for it? The logic, story and consensus builds and a decision is made.

And that, to be blunt, is the biggest challenge facing infrastructure managers: telling good evidence-based stories as much as building good assets.

For more information about ENP, please contact MWH Business Development Leader, Andrew Atkinson on +64-(09) 580 4571 or on andrew.c.atkinson@nz.mwhglobal.com. In addition, the following video link contains more information and interviews: <http://www.youtube.com/watch?v=XXcpGn8sJMM>

Upcoming events

- ▶ Ingenium conference, Dunedin 13 – 15 June, www.ingenium.org.nz
- ▶ **National infrastructure Plan: Trends and scenario modeling regional workshops, weeks beginning 10 and 17 June**
- ▶ National Infrastructure Advisory Board meeting, Wellington, 28 June
- ▶ Local Government NZ conference, Hamilton 21 – 23 July, www.lgnz.co.nz
- ▶ NZ Contractors Federation conference, Queenstown 31 July – 3 August, www.nzcontractors.co.nz
- ▶ National Infrastructure Advisory Board meeting, Wellington, 14 August
- ▶ Building Nations Symposium, NZCID, Auckland 19 – 20 August, www.nzcid.org.nz
- ▶ International Symposium for Next Generation Infrastructure, Wollongong, NSW, 30 Sept – 4 Oct, www.isngi.org
- ▶ Water New Zealand's Annual Conference and Expo, Hamilton 16 – 18 October, www.waternz.org.nz
- ▶ National Infrastructure Advisory Board meeting, Wellington, 24 October