

LOW VOLUME ROADS WORKSHOP

Wed 9 – Fri 11 October, 2019 – Ascot Park Hotel, Invercargill



Low Volume Roads Programme

Wednesday 9 October

Unsealed road data workshop – 1400 - 1700

The workshop includes a separate technical session on Wednesday afternoon on assessing the condition of unsealed roads.

Happy Hour – 1700 – 1800

Free evening

Thursday 10 October

Registration / Tea and coffee - 0800 – 0900

Welcome / History of Low Volume Roads Workshop

Mark Chamberlain, Workshop Chair

District / transportation / lead-in to Southern Scenic sealing

Gary Tong, Southland Mayor

Gary Tong is Mayor of Southland District Council and is in his second term, after a long and varied career in the south. He arrived in Southland in 1981 as a young police officer and spent 14 and a half years as the sole charge policeman in Tuatapere where he enjoyed its outdoors lifestyle. Gary then moved on to various jobs including managing Borland Lodge in Fiordland, being a Fish and Game Southland ranger, the Southland District Council property officer, an advisor at Emergency Management Southland and co-owner of a holiday park on the outskirts of Invercargill. He has been part of Search and Rescue Southland for more than 30 years. He decided to stand for Mayor in 2013 because he believes Southland is a great place to work, live and play. However, he believes the province needs to keep up with what is happening around the world and can't rest on its laurels. Being Mayor of Southland District is a fulltime commitment and his history of being involved with the community through both his work and his down time means he understands the people of Southland and is dedicated to working for them. Gary has a partner, two adult daughters, and three grandsons.

The alternative coastal route

Fletcher Cranfield, Downer NZ

Waiting on overview of presentation

Fletcher attended Victoria University of Wellington where he completed a Bachelor of Commerce and Administration majoring in Commercial Law and Management. Following this study Fletcher and his then girlfriend, now wife, travelled through Europe and both worked for a short time in the finance team of Lloyds TSB Autolease.

Arriving back in NZ at the peak of the Global Financial Crisis and struggling to find a job Fletcher returned to study, this time gaining a NZ Diploma in Engineering (Civil) a decision he has never looked back on.

In 2015 Fletcher joined The Roding Company as a Project Manager based in Wanaka working on many exciting roading and land development projects. This role ultimately led to Fletcher becoming the General Manager of The Roding Company and was recently critical in facilitating the

transaction where The Roading Company was acquired by Downer NZ.

Morning tea - 1030 – 1100

Young Presenters – Under 35's presentations

Presentation order drawn on the day

Sharing information – tools to make it easy

Declan Watt, Fulton Hogan

While the RAMM Contractor system is well proven for doing the basics well, Fulton Hogan following years of using the software, identified some challenges such as ease of reporting, ability to visualise progress and track programme, and ease of transparency to our clients.

These challenges have driven Fulton Hogan to invest in a standalone business intelligence and advanced analytics platform, named "Archimedes" to enable the level of reporting required by our clients and our own staff. With live access to the RAMM data (via an API), we are able to create bespoke dashboard reports which provide insight in to our performance.

The power of Archimedes allows our team to dive deeper into RAMM contractor data, simply and safely. Using examples from our Rural Maintenance contract in Hastings District this presentation will show how the dashboards are available to be viewed from a large screen TV on the office wall, or on computers or mobile devices accessed through our Contract Workspace (our contract web portal).

Declan has been with Fulton Hogan for 3 years and his focus is to support the development and management of the contract administration tools used on our road maintenance contracts.

Smart design – roading drainage

Joseph McLean, P&F Global

3 key points

1. Faster install of road drainage
2. Safer installation of road drainage
3. Stretch your budget

By using quality HDPE twin-wall pipe a new, smarter way to fund road drainage is happening in New Zealand. At present district councils have limited budgets to service a large network of roads and they are always looking for better ways to make use of this budget. EUROFLO is a quality twin-wall HDPE pipe and is an example of a product that district councils can use to produce a smarter road design.

Key benefits of using EUROFLO include the lower installed cost and an extended 100-year design life. Lower install costs are achieved as it is a faster and safer install than traditional concrete pipes.

There is also less impact on the public.

Europe has used this approach for decades with Australia following suit. New Zealand is moving towards this smart design with some councils having already used EUROFLO for a number of years. Working through a case study of a district council using EUROFLO in road-side drainage I will show you how these results have been, and can be, achieved.

Joseph has been passionate about pipes and drainage pipes since day one. He has worked within the drainage industry now for 10 years. Recently his focus has been on the roading industry and educating the market about smarter drainage options for New Zealand roads. He has been networking with suppliers and users of twin-wall HDPE pipe over multiple trips to Europe and Australia with the vision of bringing proven smart drainage design to the New Zealand roading industry.

The development of a new weathering test method that better reflects in-field conditions **Ebrahim Sangsefidi, University of Auckland**

The design selection of aggregates for a pavement structure is principally based on the results of a

series of engineering tests and the loading conditions expected. Most of the current aggregate laboratory tests have been developed and imported from North America and Europe where the environmental conditions and the geology of aggregates are considerably different from New Zealand. Furthermore, some existing lab tests do not reflect the in-field conditions and fail to recognise the ageing process of aggregates. This is of particular interest for Low Volume Roads where the environmental agents can easily influence road aggregate performance.

This research is part of a study funded through MBIE that takes into account the weatherability of aggregates and the wide range of in-field environmental aspects. The wider research aims includes encouraging more sustainable use of all aggregates closer to the construction site, as transport costs to site are a significant proportion of total in place costs. A specific aim of this research was to improve aggregate selection procedures by evaluating an aggregates ageing and weathering characteristics that better reflects the behaviour of pavement structures over a period of time.

To this end, the natural weathering behaviour of road aggregates in two andesite quarries in the North Island of New Zealand was investigated. The results indicated an intense weathering of road aggregates can occur thereby producing detrimental clays within a short time-frame (less than 15 years – i.e. within the expected life of the pavement). Whilst significant weathering occurred, current test methods failed to demonstrate this same weathering. Furthermore, the propensity of road aggregates to absorb water was evaluated using a continuous water absorption method that works based on Archimedes' principle. The proposed method revealed the temperature and solution dependent characteristics of the water absorption process, whereas the current testing procedure did not. Finally, a series of modifications are proposed to particular parts of the Weathering Quality Index testing procedure. These modifications better account for the rate and intensity of weathering as a function of the wide environmental conditions that can occur when an aggregate is placed in-field. Overall, the research concluded that both environmental conditions and microstructure characteristics of aggregates play important roles in the durability and engineering performance of unbound granular materials. Thus, it is essential to take both parameters into considerations when selecting aggregates to ensure more sustainable and long term aggregate practices are developed in New Zealand.

Ebrahim Sangsefidi is the recipient of a funded research scholarship from MBIE and he is about to finish his Ph.D. at the University of Auckland. His research focuses on the Marginality concept of aggregates in the unbounded granular layers. Before undertaking doctoral studies, Ebrahim worked as pavement, traffic and mainly road and railway geometric designer for nearly six years.

Emergency works WDC – April 2017 Storm events Ann-Elise Reynolds, Whakatane District Council

April 2017 – The Whakatāne District was subject to two large ex-tropical cyclones Debbie and Cook just days apart from each other.

5 April 2017, Cyclone Debbie brought heavy rainfall right across the district resulting in numerous slips, underslips, flooding and major road closures cutting off connections to many of the district's small towns.

6 April 2017, the high river levels in the Rangiteiki River caused the stop bank to breach in the town of Edgecumbe, resulting in major flooding, devastation and a full evacuation of the town and surrounding areas.

13 April 2017, extreme winds from Cyclone Cook, brought down trees and power lines, closing numerous roads that had only recently re-opened, and cutting off power to the majority of the district. Coastal inundation also occurred at our beachside settlements of Thornton and Ōhope.

This presentation tells the story of how the district-wide community came together to help all those in need, and to support Whakatāne District Council in the restoration process. It shares the experiences and learnings through all stages of the storm recovery, from Civil defence and initial response through to permanent reinstatement.

Ann-Elise Reynolds is the Bay of Plenty Regional Champion and Team Leader for Strategy and Asset Management at the Whakatāne District Council. She has worked in the roading industry for 10+ years as a consultant, contractor and now for local government.

**Report back from International LVR
Carly Hamlin, Fulton Hogan**

Lunch - 1225 – 1325

**Remote unsealed roads in high demands: Prioritising budget on the Gisborne Network.
Dave Hadfield (Tairāwhiti Roads), Darrin Davy and Hayden Bed (Downer)**

The network of unsealed roads in Gisborne is over 1,000 km in total length. The demand on these roads accrues not only from intense log transport activity, but also storm events. This support of increasing forestry demand has come at an expense of ‘Mum and Dad’ roads. Roading expenditure needs to be targeted, and equitable in order for this to take place, prior information is needed. The presentation reports on three forms of information which prioritises areas for more detailed inspection and costing. The information is collected at driveover speed and supplemented by information available on the web.

As well as the high-demand roads, often-lesser defects need treatment on the component of unsealed network that is more densely populated by ratepayers. These roads have been separately identified and prioritised in allocating funding and prioritisation.

**Innovative Methodologies to Remedy Chip Seal Flushing
Allen Browne, Hiway Group**

A challenge for network maintenance operators is the prevalence of surface flushing of chip seal and corresponding safety issues. Substantial quantities of maintenance funds are exhausted addressing chip seal flushing via water cutting, resurfacing and overlay/reconstruction.

Resurfacing of flushed chip seals is challenging and if excess binder is not remedied flushing can reoccur in a short period of time further compounding the problem. While Hiways have undertaken countless flushing remediations via stabilisation of the upper pavement incorporating the flushed surfacing, we have been striving to develop a remediation that addresses surface flushing and corrects binder-stone volumetrics to provide a long-term durable solution with corrected texture. Conventional flushing remediation methods often struggle with variable texture transversely and longitudinally.

This presentation will outline the pros and cons of conventional methods and present an innovative new method Hiway Group have developed and employed in Australia and more recently trialed in New Zealand. Hiways Retex can correct surfacing texture, optimise existing binders and accommodate variation in degree and extent of flushing. This method was utilised successfully in emergency works to remedy heavily flushed chip seals in the Cairns Tablelands (2018), an incident that took many vehicles off the road due to seal ‘carpet wrapping’ around truck tyres (and extensively reported, even in NZ). The method and performance have been endorsed by Queensland Main Roads and the success of several trial projects in New Zealand will be discussed.

This presentation will provide case studies, lessons learned and overview to permit network maintenance operators, Consultants and Clients to gain an understanding of where different approaches may be favoured and allow this innovative treatment methodology to be considered alongside conventional options.

Allen has been the Group Technical Manager with Hiway Group (prev Hiway Stabilizers) since early 2006 and has been a chartered Civil and Geotechnical Engineer since the late 90's. Allen is always seeking new methods and additives for materials recycling/improvement and he has been busy providing technical guidance for research, design and construction operations throughout Hiways divisions in NZ, Aus and Fiji. Allen is an active member of a number of industry groups including the National Pavements Technical Group.

Advanced restoration methods extend timber bridge useful lifetimes. Improve load capacity and save local governments significant costs while preserving the heritage of the local community and reducing risk

Dan Tingley, Wood Research and Development

Local governments own almost all the remaining timber bridge inventory in Australia. Some estimates place the total number of timber bridges in Australia and New Zealand still in service at 42,000 counting highway, jetty's, pedestrian and railway bridges. The average age of these timber bridges is continuing to increase with a significant block of the timber bridges having an average age of 82 years. Local governments often have large numbers of timber bridges typically on low volume roads and are associated with unsustainably high replacement costs in Asset Management Plans. Further, they have little training in dealing with timber bridge renewal and restoration. The typical method of dealing with this aging population of timber bridges has been to retain outside consultants who themselves have little training in timber design and timber bridges. For decades the undergraduate training programs for Australian and New Zealand engineers has contained little or no formal training in timber design and inspection. Further, only a handful have any wood technology training that would provide the necessary background to justify their role in working with local governments to conduct inspections, design restoration solutions, develop maintenance plans and undertake renewal of these bridges. The advice received by local governments on how to manage their timber bridges is usually based on 100 year old technology provided in state authority timber bridge maintenance manuals.

State authorities have very few timber bridges left in their inventory and consequently there is little value for them in developing new timber bridge maintenance standards. Asset managers typically value the timber bridge inventory renewal process by replacement with concrete bridges. The typical method of dealing with timber bridges has been to prioritize the inventory for replacement and downward rate the remaining timber bridge inventory. Today with so many of these timber bridges supposedly needing to be replaced or down rated communities can't function effectively on the road network. Local governments face costs that are out of reach. Subsequently local government councils face significant depreciation increases that can't be serviced without ratepayer tax increases. Many shires don't capitalize the restoration of timber bridges and expense such costs as maintenance costs. With an average age for timber decks that are vertical fastened from the top of 15 years, log girders that are vertically bolted from the top of 25 years and timber piles of 35 years asset managers are finding it hard to justify any expenditures for timber bridges beyond replacement with concrete. The result; further poor quality maintenance and downward load rating of timber bridges due to poor maintenance practices. Everyone says; these timber bridges need to be replaced with a new concrete bridge, just keep the old timber bridge going a little longer till we get the money for a new one. With so many timber bridges in poor condition it is impossible now for many local governments to replace them all. What do they do!!

This publication tells the story of one such Council in Northern Queensland in the worst decay, termite, exposed corrosion an embedded corrosion zones in Australia who faced this situation. Six years ago they had 69 timber bridges that were identified as the number one risk to the community in Transport Assets. They responded by having their timber bridge management and maintenance staff get educated as to how to properly inspect timber bridges, maintain and restore them and renew them. They learned how to reduce cost, extend life and utilize the residual assets that still had life in them in all their timber bridges. Along the way they won the prestigious IPWEAQ 5 to 10 million dollar project award for their restoration of 11 concrete/timber bridges on one road that were restored with timber, saving millions for their community. Their story is a story that everyone managing, maintaining and restoring timber bridges will want to hear. After 8 years they have reduced timber bridges risks to number three, saved tens of millions of dollars and restored 30 structures utilizing advanced methods of inspection, maintenance and renewal. In the process the council has prioritised more funds for bridge renewal in recognition that staff are thinking outside the box and managing their timber bridge inventory in a new sustainable way!

Dan has worked in the timber bridge industry for over 40 years. He received his Bachelor of Science in Forest Engineering and Master of Science in Civil Engineering from the University of New

Brunswick. He completed his Ph.D. at Oregon State University in Wood Science, Technology and Civil Engineering. He has been a professional engineer registered in many provinces and countries for nearly 35 years.

Dan serves as Executive Director for Wood Research & Development Ltd.

He typically acts as senior structural engineer on over 30 bridge projects a year around the world as well as several buildings. His specializes in timber railway bridge inspection, maintenance and restoration, many of these bridges are over 100 years old.

Safe networks level crossing programme

Murray Fletcher, Beca

The Transport Agency and KiwiRail have started work to trail a new approach to safety on rail level crossings.

In New Zealand there are over 2,500 rail crossings including public roads, footpaths, cycle paths and private access ways that create the potential for serious crashes. On average, each year three people die, six people suffer serious injuries and there are 140 reported near-miss incidents at railway level crossings. Due to their size and the time it takes to clear a crossing, trucks are over-represented in these near-misses.

Together the two organisations are looking at ways of reducing the risk alongside the number of deaths and injuries at level crossings. Local Authorities are also being involved where the crossing includes a local road.

The process commences with a Level Crossing Safety Assessment, referred to as an LCSIA. The LCSIA identifies issues according to a set of procedures and guidelines and makes recommendations on safety improvements.

As part of the Safe Networks Programme, several sites are being looked at across New Zealand with 35 crossing upgrades programmed this calendar year and a further 82 sites over the following two years depending on funding.

Treatments include improved signage, track upgrades including new Edilon concrete slab, road / rail interface, escape bays, pedestrian crossing improvements and in some cases, complete crossing closures.

This new approach will see a reduction in deaths and serious injury at level crossings and an improved level of comfort.

Murray is an experienced Manager and Civil Engineer with extensive experience in the development of infrastructure projects in New Zealand, within the Transportation, Water and Environment, and Urban Development Sectors. He has extensive experience in asset management, road and bridge maintenance, road design and construction, construction management and management of road networks, including forward planning, resource programming, prioritising and optimising of maintenance and construction budgets.

Table topic briefing – 1445 – 1455

Afternoon tea - 1455 – 1525

Table topic presentations – 1525 – 1645

Close

Workshop Dinner

1730 Coach departs Ascot

1745 Transport World walk through

1900 Welcome drink dinner

2215 Coach departs for Ascot

Friday 11 October

Registration – Tea and coffee - 0745 - 0830

UK Local Roads – Managing the backlog

Steve Batchelor, Managing Director of Saber Ltd, UK

In all parts of the world local roads, both rural and urban, are the Cinderella of the road network and as budgets are squeezed they are increasingly and severely underfunded. The importance of the right mix of data collection, analysis and implementing robust policy and strategy are key to ensuring that maintenance funding has the highest return on investment. Steve's keynote presentation is a study of the UK's approach to asset management of local roads and how future innovations are set to revolutionise the highway management structure.

Steve is the Managing Director of Saber (Asset Management) Ltd in the UK with an extensive career spanning over 40 years in Highway Management, both in the public and private sectors in the UK, Canada and India. Steve's experience has centred on the essential element of data collection and analysis. He is passionate in the collection of accurate data without which, effective, efficient and timely decisions cannot be made. His companies have a well-earned reputation for the delivery of such quality data and its implementation to effective asset management. He has been highly influential with asset management within the UK which has included the chair of the Survey Steering Group during the development of the United Kingdom Pavement Management System (UKPMS).

Unsealed road condition. Using existing tools smarter to measure

Lee Hautler, HEB

In Selwyn, we had traditionally collaboratively managed our unsealed network by having extremely good network knowledge and managed our works to fit the budget we had available.

Does this sound familiar?

Councillors asked the question, what would it cost to increase our level of service? With an ever-increasing customer expectation of unsealed roads this is now very much a hot topic.

There are several clever tools and applications in the industry being used which cost and can have IP challenges over longer terms.

We deliberated and determined that the science of it all hasn't really changed that much and that with our understanding of RAMM and its applications we could bring an old school spreadsheet tool (before the turn of millennia) into 2018 terms using RAMM and its refreshed applications.

This presentation will explain why we did it and how it works. Yes, it is a clever little User Defined Table (UDT).

And if you manage to sit through the presentation engaged, you can have it if you would like it.

All it will cost is your time. It was designed and is used whilst completing the already required inspection regime in our contracts. There is no additional software cost.

How NZTA manages its structure

Liam Coleman, NZ Transport Agency

The NZ Transport Agency has approximately 11,000km of state highway, 4500 bridges/culverts which equates to approximately 42% of all Local Authority & State Highway bridges in New Zealand (based on deck area). Bridges are critical links on any network, be it high volume to collector routes, their safe management, resilience and ongoing level of service are vital for the communities that they serve. As our bridge stock continues to age they are continually being pushed to achieve greater capacity and access to our customers, examples being the introduction of 50MAX and High Productivity Motor Vehicles (HPMV's). Through a process of inspection, investigation, analysis, risk management and intervention we prioritise all our bridges based on the 4 R's; right place, right risk, right time, right treatment, irrespective of where on the network they may sit. I will give a high level overview of how the NZTA manages their bridge stock while trying to meet our customer's expectations, ongoing network demands and achieve the best whole of life costs for the NZ

Transport Agency and New Zealand inc.

Liam is a Chartered & Fellow Civil and Structural Engineer with 16 years' experience primarily in bridge inspection, design, assessment and asset management. Liam has extensive experience of managing railway and highway assets from Ireland, UK and New Zealand. Liam currently works for the NZ Transport Agency National Structures team responsible for the development and application of operational policy, technical standards, processes that achieve the agreed levels of service of bridges over the asset lifecycle at the least whole of life cost.

Morning tea – 1010 – 1040

Knowledge is power – managing road maintenance on a remote island

Neil Bennett

Fulton Hogan won the contract to deliver maintenance services on the Chatham Islands, a remote location 800 km east from the South Island of New Zealand. Despite the remoteness, we have been able to introduce simple, cost effective performance monitoring techniques that have delivered a significant increase in customer satisfaction.

This presentation explains the use of a cell phone application, Roadroid, originally developed in Sweden to survey roughness on sealed roads, to monitor the level of service on all the island roads – the majority of which are unsealed. As an additional service Roadroid upload each photo to a free public website called Mapillary (www.mapillary.com) which is a global network of contributors who want to make the world accessible to everyone by visualizing the world and building better maps. The Contract commenced in January 2016 and this paper presents the findings from three years research and condition monitoring and how the information can be used to make better management decisions.

Neil has been Asset Manager with Fulton Hogan for 12 years and his focus is to support the local authority maintenance contracts. He has been on the committee of the LVR workshop since 2003.

Planning to bridge the gap – Clarence Valley access

Peter Thomson, Kaikoura District Council and Mark Weeds, NZ Transport Agency

The Clarence Valley Access project is one of the most challenging projects in Kaikoura District Council's earthquake recovery programme. In the upper valley the Glen Alton Bridge across the Clarence River was lost during the M7.8 earthquake in November 2016, cutting off the small community on the south side of the river. What could easily be viewed as a humble bridge replacement, in reality is a complex case of technical, financial and community considerations. The Council and NZTA have been working together through the business case process to help identify the preferred way forward. In the meantime temporary access continues to be affected by the dynamic post-earthquake environment.

Peter Thomson is responsible for delivery of the Rebuild Programme of earthquake damaged Council infrastructure including roads, bridges, sewer, water, and stormwater. He is a senior executive and local government infrastructure manager with a background in leading the delivery of services through traditional and alliance delivery models.

Mark Weeds is an Investment Advisor in NZTA's System Management Central South Island region. His role sees him working alongside local Councils in the Canterbury and West Coast areas in the development and delivery of their land transport programmes.

Recycled crushed concrete and sealed Low Volume Road construction

Pritesh Karan, Downer NZ

Low volume roads in New Zealand, comprising sealed and unsealed parts of the network, are predominantly located in rural parts of the country. Harsh topography is often a feature, with drainage challenges and aggregate in reasonable proximity may be of marginal quality. The maintenance of low volume roads is largely governed by financial constraints. The material available

for pavement construction is predominantly of marginal quality in comparison to the higher quality material used for high volume roads. The increase in moisture susceptibility of the marginal aggregates make it prone to premature failure, especially considering their exposure to harsher environmental and topographical constraints.

Recycled Crushed Concrete (RCC) offers an environmentally sustainable alternative for the construction of sealed low volume roads. The self-cementing capability of the material allows it to be more resilient to environmental effects in comparison to natural aggregates. Laboratory testing of RCC indicates that its engineering performance supersedes that of premium quality natural aggregates. The increase in demand of premium quality aggregates due to urban infrastructure demands further emphasises our responsibility to conserve our natural resources for future use.

Pritesh is a civil engineer at Downer, focusing on providing engineering design solutions and incorporating research into designs. His research interests are pavement material science and laboratory to field correlation of methods. Pritesh is a University of Auckland graduate where he completed his Bachelor of Engineering and Doctor of Philosophy.

Rural Whanganui: Managing scour

Dave Nicholas, Rangi Woods, Downer NZ and Brent Holmes, Whanganui District Council

Whanganui District road network includes approximately 100 km of low volume roads on the sides of incised river valleys. The roads provide access to remote communities as well as a route to market for timber and agricultural products. The sides of these valleys are formed in soft mudstone and are experiencing active fluvial erosion. This not only compromises the road, but also the foundations for more than 100 bridges associated with these roads.

The maintenance operation operates under an Alliance between Whanganui DC and Downer: both sides are motivated to achieve cost-effective outputs, and good performance is rewarded (“pain applied as well as “gain”).

The Whanganui Alliance has implemented a “stitch in time” approach to managing scour.

Components of this include identifying, monitoring and ranking vulnerable sides and design of small arresting works.

The presentation will explain the system and report progress.

Lunch – 1210 – 1310

Coastal Living – Protecting settlements from wild seas

Kushla Tapper, Hurunui District Council

Amberley Beach village is just above sea level. There’s only one road in or out and lagoons on either side. Waves can be in excess of 4m tall and wash the road away. The “Renourishment bund”, using local material provides peace of mind and protection. The result has very low environmental impact and high amenity value, whilst protecting infrastructure.

Conway Flat Road has sea cliffs of 2-6m high. This is the only way in & out for large commercial landholdings. When the earth shook in November 2016, large areas of road shoulder cracked open and fell to the sea. If we did nothing, the road would soon follow. So we built a great rock wall.

Kushla fell in love with roads over 15 years ago. She is passionate about Low Volume Roads and delivering a great, fit for purpose, outcome for the community. Kushla enjoys communicating with the wider public about what we are doing and why – ‘telling our story’.

Are we changing?

Tony Lange, NZ Transport Agency

Are we doing the same thing and expecting a different answer?

The Audit and Assurance team of the NZTA review financial and network management and performance on all Approved Organizations (that’s you) on a cyclic program. The team makes recommendations where a change in performance will help the AO maintain or support receiving

funds from NZTA. Some of the recommendations are for process improvements. In the last couple of years, the team made in excess of 160 recommendations covering financial management, procurement, network management, database and safety performance. Many of these recommendations are common across AOs. Tony will outline the common issues found by the team. Some are a simple fix, some not so. Many are known to the AO but we see no change.

Mt White Road – Hawdon River Bypass Bridge damage
Mark Chamberlain, Selwyn District Council

As a result of an extremely heavy rainfall event in the area of Arthur's Pass (330mm of rain recorded at Arthur's Pass in the 24 hours from midnight on 7 November until midnight on 8 November 2018 with 110 mm during the 4 hour period between 7am and 11am) there were extremely high flood discharge and velocities in a catchment the size and gradient of the Hawdon River.

The associated flooding caused severe damage to the Hawdon River Floodway Bridge and destroyed river protection sites upstream of the bridge including 75m of gabion baskets and mattresses and a length of river material bunding.

The physical works to reinstate includes the cost of:

- Replacing the upstream river protection works including 225m of gabion baskets and 75m of gabion mattresses;
- Reinstating the destroyed river material bunding;
- Replace the destroyed Hawdon Floodway Bridge with a structure consisting of precast concrete box culverts.

The presentation will give details of the event, the damage caused, the process for funding the reinstatement and the completed (hopefully) project.

Mark is the Team Leader Transportation in the Service Delivery unit at Selwyn District Council. He has worked in local government since 1983 at Ellesmere County Council (prior to amalgamation in 1989) and Selwyn District Council predominantly on roading maintenance and construction.

Wrap up / close - 1410 - 1430