

Building Communities

Beyond the Front Gate



It's Never too Young to Start with the Big Toys

Kevin Scovell and Fabian Spollen from Lyttelton Wastewater Work Package 4 visited the preschool with one of the Fulton Hogan excavators, allowing the kids to have a

The kids were very excited to have a look, try on the PPE, take a seat, and play with the controls in the safe environment of the school yard.

For the last 15 months, the team have been working on the



wastewater pipeline and water main renewal. The kids have been fascinated by the trucks, excavators and loaders going up and down as the works progressed.

Kevin says; "We're currently

working on the road outside the preschool. The kids wave at us every day, so we arranged a special visit."

"Some of the kids were shaking with excitement – a great day all round."



AUGUST 2020

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Outstanding Commitment to Road Safety

Dr Bryan Pidwerbesky is a mild-mannered man who's interested in friction. Fulton Hogan's Technical Director – Pavements & Materials Engineering has spent more than 30 years helping ensure vehicles adhere to roads, through applied research and engineering practice with universities, road transport authorities and contractors.



When people think about road safety, the person who designs the surface isn't generally the first to spring to mind. Bryan, however, works at the exact point that the rubber hits the road, literally and figuratively. His working life has been about increasing skid resistance and road smoothness, and hence, driver and road worker safety.

It isn't possible to know how many lives his work has saved, and how much trauma it has prevented. But many of the gains in road quality and safety in Australasia over the past three decades can be traced back to the name Bryan Pidwerbesky.

The son of a highway maintenance manager, Bryan wanted to be a road engineer from the age of 10. With a Bachelor of Science in Civil Engineering and a Masters in Science in Transportation and Geotechnical Engineering from the University of Saskatchewan (in Canada), Bryan came to Christchurch in 1986 as a lecturer in pavement engineering at Canterbury University. There he completed his PhD in Civil Engineering on the fundamental behaviour of flexible pavements under various loading conditions. Bryan taught at Canterbury University from 1986 to 1998. Bryan commissioned CAPTIF – the Canterbury Accelerated Pavement Testing Indoor Facility – and Canterbury University's transportation laboratory. He also established the first national laboratory for measuring PSV – polished stone value – to measure the degree and speed at which stones 'polish' – and hence provide less friction for tyres. As a direct result of this work, all New Zealand quarries have since been required to routinely PSV test their stones. Bryan has also been a member of the AUSTRROADS Pavement Task Force (and its preceding groups) for two decades, providing an Australasian-wide perspective on road surfacing friction. He has also been central in advancing the use of calcine bauxite (an aluminium by-product) and GMA (Glenbrook Melter Aggregate (a by-product of steel industry) in road surfaces for greater friction.

His work in designing safer road services is a constant balancing act. For example, while more voids in a surface generally mean more adherence between tyre and surface (and lower noise), it also allows more water to enter the paving and begin to reduce adherence qualities. In a country which allows minimum lower tyre tread of 1.5 mm (compared with as much as 5mm in Europe), New Zealand's roads have to do much of the work of helping vehicles remain on them.

A strong advocate of road shoulders and increased surface smoothness, Bryan has also had to balance such value-added road features with cost and the need to save lives.

He is a widely acknowledged leader in the research into recycled plastic and rubber in roads on both sides of the Tasman, for performance and environmental gains, in particular Plastifphalt®. Another focus has been advocacy for the use of emulsions in road sealing, as against the traditional 'cut-back' technique, leading to the launch this month of EmulSure®. EmulSure® allows roads to be sealed at considerably lower temperatures, removing the need for highly combustible kerosene. Bryan makes no distinction between the importance of the wellbeing of drivers and of road builders – they are both paramount.

Since 2000 Bryan has held a number of senior positions at Fulton Hogan (including group technical manager, executive general manager, and technical director for pavement and materials), co-ordinating, managing and leading Fulton Hogan's technical teams and laboratories, leading technical developments in pavement and surfacing design, and managing the company's extensive research and development programme.

First Biodiesel Facility in the North Island opens



Wednesday, 29 July, marked the opening of the new truckstop facility at Reliable Way. The truckstop development forms part of our bulk fuel facility roll out, led by corporate procurement focusing on the environmental and operational benefits to the business.

With the Fulton Hogan Board present, Chairman, Dean Hamilton, had the pleasure of cutting the ribbon on the new fuel facility comprising of two, 30,000 litre tanks holding B100 from Greenfuels and mineral diesel supplied by our bulk fuel preferred supplier Allied Petroleum.

The facility offers refuelling from both sides, with three fuel pumps that can deliver the biodiesel blend.

This marks a significant milestone for Fulton Hogan and Greenfuels™, as this is the first biodiesel facility in the North Island. It enables the Auckland regional business, to further reduce its carbon emission focusing on the 2025 goal of reducing carbon emissions by 25%.

GreenFuels™ specialises in providing New Zealand with biodiesel, a less-hazardous, environmentally friendly fuel that can directly replace conventional petroleum



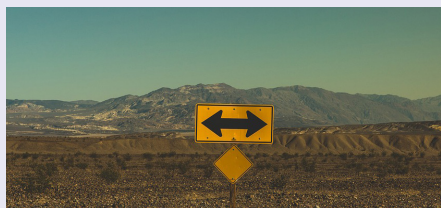
diesel needs. It's made right here in New Zealand, offering a fuel alternative that can really make a difference. The biodiesel is made from 100% recycled vegetable oil, refined it in our Christchurch factory and then bulk shipped to Auckland in partnership with Allied Petroleum.

Representatives from Watercare Services Limited Enterprise Model were also present. Pictured with Dean Hamilton is

Anna Mogridge, Agile Lead for Watercare Enterprise Model P1st Team. The Enterprise Model has a bold carbon reduction target of 40% relating to construction carbon across the \$2.4BN programme over the next ten years with biodiesel playing a significant part in realising this target.

Signing the Way

Fulton Hogan has partnered with the Tai Aranui/Nga Maata Waka driving school to make sure that the learner drivers can get a good idea of what to expect when out on the road. Fulton Hogan have donated a large number of excess signs to put up around the driving course.



South Canterbury - the hot bed of Innovation!



Fulton Hogan are proud of their close involvement with South Canterbury's pioneering NZQA-approved Certificate in Commercial Road Transport (Heavy Vehicle Operator) course, preparing young people for the transport and logistics industry. It's also been their pleasure to donate a driving simulator for driver training and work experience for students. The innovation and passion shown by everyone involved in getting this off the ground has been infectious – and together Fulton Hogan is showing the rest of the industry what can be achieved with vision and hard work.

Fulton Hogan is also proud to have worked with Timaru District Council in a New Zealand-first. The province that was home to the first heavier-than-air flight is also home to the first road sealed with EmulSure®. EmulSure® is a brand new means of sealing that was developed and tested by Fulton Hogan in South Canterbury. It enables sealing to be done in colder temperatures than normal, increasing the length of the 'sealing season'. Because EmulSure® is applied

at much lower temperatures than normal (typically 70-80 degrees versus 160 to 180 degrees), it is safer for those applying it, too. EmulSure® is also proving to be superior in terms of durability.

Fulton Hogan's Surfacing Industries Manager Thomas McGeever says, "Our trials with different bitumen products in Timaru have exceeded expectations, with results showing a reduction in chip loss and therefore less need for future remedial work,"

The initial trials were done on the intersection of Seadown and Dominion Roads. Over the past 12 months Fulton Hogan have laid around 450 tonnes of EmulSure® in sites between Temuka and Waimate. Following the success in South Canterbury Fulton Hogan expanded the trials to several other sites, including Waikato and Dunedin before launching EmulSure® nationally in July 2020.