

## **Innovation to stretch the safety dollar on the Wellington NOC**

### **Daren Courtnage**

*Capital Journeys, Wellington*

### **Dave Whitehead**

*Senior Pavement Engineer, New Zealand Transport Agency*

Capital Journeys, a joint venture between Fulton Hogan and Opus International Consultants, and contractor for the New Zealand Transport Agency (NZTA) on the Wellington Network Outcomes Contract, has developed a suite of tools and approaches to promptly and cost efficiently manage the skid resistance for the State Highway Network.

Through close collaboration with software development company, Lonrix, Capital Journeys has developed a tool within JunoViewer to manage the skid resistance exceptions on the network. This tool brings together the sources of data required to manage skid resistance to NZTA's skid resistance management specification (T/10) requirements in a fraction of the time previous manual methods allowed. This, in the first instance, allows us to become timely in dealing with skid deficiencies on the network while also providing a greater level of auditability. Combined with improving data assessment, we have used innovative treatment techniques to provide cost-effective treatment options while using less of what are becoming limited resources, in terms of high skid resistance products. This has been achieved through micro-milling i.e. removing the top 2-3mm of surface, exposing 'new' aggregate, and friction sealing, using polymer emulsion and small grade aggregates. These treatments defer the need for more costly and more disruptive surfacing treatments until such point that the surface asset, in its totality, has reached the end of its service life, providing a better whole-of-life solution for NZTA's asset. In addition, the micro-milling solution provides a treatment option that can be applied during any time of the year, enabling urgency to be achieved in dealing with skid deficiencies.