

## **A Safe, Sustainable, Long Life, Low Noise Surface**

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The NZ Transport Agency (NZTA) has been working with its partners in developing an epoxy-modified open-graded porous asphalt (EMOGPA). The aim was to create a low-maintenance, long-life (>30 years), low noise surfacing material to replace the traditional low noise motorway surfacing that had an average life of 8 years. This would be more sustainable in terms of aggregate use but also needed to consider safety over a much longer period of time. The development has the potential to reduce the NZTA's annual low noise surfacing maintenance budget to 1/6 of its current value.

The New Zealand development has been a collaborative effort between Opus Research who led the New Zealand input into a OECD/ECMT (European Conference of Ministers of Transport) Joint Transport Research Centre research programme and laboratory studies, Fulton Hogan (Surfacing Contractor) solving the manufacturing and laying issues and the NZTA providing research funding, managing the research, undertaking the accelerated pavement testing at the Canterbury Accelerated Pavement Testing Indoor Facility and obtaining trial sites.

Previous papers have specifically reported on the implementation of EMOGPA from research to its introduction as a Materials and Construction Specification on New Zealand's major road projects by multiple contractors in New Zealand's four largest cities. This paper reviews efforts to improve EMOGPA's already excellent sustainability and explains the implementation approach taken to ensure safety over EMOGPA's long life.

Keywords: CAPTIF, Long life road surfaces, Low noise road surfaces, EMOGPA, Epoxy Bitumen.