

LGMA QUEENSLAND

# AWARDS FOR EXCELLENCE 2020

## LOCAL GOVERNMENT SMARTS — PAVEMENT FIRSTS

'Smart' isn't an adjective that is often applied to pavements. However, a Logan City Council project has done just that. An Eagleby pavement stretch is the first of its kind in Australia to capture key data that allows Council to manage unstable ground in a more efficient and targeted way. Using 90 sensors at different levels of the pavement, Logan City Council is able to significantly reduce the amount of in-situ material which needs to be removed and replaced with new pavement.

This project is also Australia's first road project constructed using Intelligent Compaction (IC) technology. The technology allows the roller operator to gain real-time feedback while on the road about the compaction quality and adjust as they go through the integration of measurement, documentation and control systems. All of this means that roads at risk of premature failure can be identified and investigated before costly problems occur.

Today, the project team remotely withdraws large amount of live data from the server on a regular basis. This data forms the foundation of Australia's first study attempt to develop a pavement design manual to confidently quantify the benefit of utilising geogrid in pavement. All of this means savings for council and better roads for residents.

This work was undertaken as a collaboration between Logan City Council and road technology experts from Queensland Department of Transport and Main Roads, Australia Road Research Board, Queensland University of Technology and University of New South Wales. The collaboration model demonstrated in this project has also generated ideas in industry on how local governments can play a leading role in research and development type of work.

Logan City Council is a contender in the 2020 Queensland Local Government Awards for Excellence in the category of Collaboration.

