

Collecting road users' experiences of safety using geospatial survey methods

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Improving safety is a key component to any road network upgrade or development and one that roading agencies' consider when investigating and designing safer solutions. Experts and specialists quantify safety in relation to physical parameters such as road surface, delineation, and vehicles but it is also useful to validate expert ratings alongside those of road users, so we can better understand the impact road interventions and design could have in reality. Traditionally, it has been difficult to gather data on road user perceptions of safety that can be linked to a particular road feature, and in ways that incorporate real world experiences into the design process.

Opus, on behalf of the NZ Transport Agency, have recently employed an innovative research tool to collect robust geospatial data which can be used to inform road safety. The public participatory geographic information system (PPGIS) survey tool combines an interactive online mapping tool with a survey function, allowing participants to 'show', rather than simply describe features of places where safety is a concern. The tool allows data, previously collected qualitatively, to be quantified through geospatial referencing, allowing it to be quickly displayed and analysed visually. We will report on projects where the tool has been used to understand road users' experiences of a particular feature or section of road to investigate and inform long-term improvements to the safety and efficiency of the road. PPGIS tools can provide road safety professionals with the means to quickly and robustly gather valuable information from road users, alongside expert knowledge.