

Taking Crash Data Analysis to the Next Level

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Crash analysis for road networks has generally been undertaken on a network by network basis; however, road users are usually not aware they are crossing network boundaries. Therefore, in order to achieve the greatest crash reduction potential, crash analysis should not stop at notional boundaries. The authors were commissioned to develop road safety strategies for arterial road networks that crossed jurisdictional boundaries and were challenged to present the analysis data in a more usable format than was available at the commencement of the project.

The presentation describes the innovative method used to plot data from the Crash Analysis System (CAS) with road geometric data and spatially analyse it within a GIS framework. The aim of the presentation is to demonstrate the thematic analysis of roading corridors that traverse more than one local authority area. The authors describe their consideration of the contribution of various factors to crashes on the networks and the relationship between these crashes and available geometric data.

The presentation concludes that by using a relatively simple extension to available data it is possible to readily identify the portions of a network (and across networks) where strategies could or should be applied to address particular types of crashes. It also highlights the importance of considering transportation corridors rather than discreet lengths of road within a single local authority area.