

## ABSTRACT SUBMISSION FORM

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### Overview of Presentation

Recent work has shown that the safety of roads at night varies with the amount of lighting. This enables us to look at the benefits and costs of providing different levels of lighting using different light sources. For urban situations the highest benefit cost ratios are achieved at the highest traffic volumes and when the pavement is most highly lit. Results indicate that best levels for safety are in the V2 and above range and that the benefits of road lighting often substantially exceed the costs, including the energy costs. Although adaptive LED lighting offers both crash benefits and reduced energy consumption, at current costs higher lighting levels are worthy of serious consideration. Also, the proposed changes to the R-Table in the NZ lighting standard do not markedly increase costs- if anything costs reduce. RCAs need not be concerned the changes will introduce new costs. There may even be an opportunity to revise upwards some New Zealand uniformity standards. Further work is required to better understand how rural night crashes relate to lighting levels at various volumes and to compare the benefits and costs of road lighting with other possible alternative road safety measures.