Modern LED streetlighting has environmental and economic advantages over the high pressure sodium (HPS) lighting which it is steadily replacing. It uses around one third the energy of HPS lighting, and luminaires last on average much longer than HPS luminaires. These are important factors when Road Authorities are often strapped for cash and when our electricity resources may become stretched with an expected surge in EV numbers.

LEDs are available with a wide range of colour spectra from those with a large percentage of blue light to those with a spectrum not far from that of an HPS luminaire. Up to now there has been no definitive crash based work done on how the spectra of these lights affects safety. The spectrum of a streetlight may impact on safety in several ways including possible impacts on peripheral vision, driver alertness and the absorption of light by the lens of the eye prior to it reaching the retina. This presentation will look at the indirect evidence in the literature regarding the spectra impact of streetlighting on safety and make observations as to how this might affect choice of road lighting luminaires.