Paper Title: Assessment of the risk from natural terrain landslides

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Abstract:

A methodology to quantify the risk to people in buildings or in vehicles arising from natural terrain landslides is presented. For any defined region the risk is evaluated in terms of the number of expected casualties per year, an F-N curve and in terms of the annual risk of death to the actual individuals most at risk. The methodology requires understanding of the rate of occurrence of past landslides in the region and how this varies with landslide volume. Detailed field mapping and aerial photograph interpretation is required to achieve this understanding. Mitigation measures are discussed and the method extended to estimate the cost effectiveness of these measures. Due to the inherent inconsistencies relating to their construction and maintenance history of man made slopes it is difficult to directly extend the methodology to man made cut or fill slopes. Only by categorizing these slopes into groups with similar likelihood of failure can this method be used.