

# Urban Landslides: Challenges for Forensic Engineering Geologists and Engineers

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**ABSTRACT:** Each year landslides cause 25-50 deaths and result in \$3.5 billion in damage within the United States. Many of these landslides occur in urban settings. Urban landslides occur in or near cities, generally involving humans, houses and/or businesses, and establishing the cause can be a challenge to any forensic engineering geologist and geotechnical engineer. Each landslide is a unique relationship of environmental circumstances, and the best mitigation approach is of paramount importance. Cities need to develop landslide inventory maps and corresponding susceptibility maps in order to help prevent further loss of human life and property. Controlling the water and recognizing ancient landslides, along with the use of LiDAR to reveal the geology history hidden by foliage can prevent future examples of damage and despair. Case histories such as Kelso, Washington, Burlingame Place, Bazazz Landslide, Newell Creek Apartments, Estacada Landslide, and Hidden Lakes Landslides have proven to accentuate the above points. The importance, lack of availability, and cost of landslides insurance for the average homeowner is also significant.