



Reducing landslide hazards through a partnership between the U.S. Geological Survey and the American Planning Association

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Faced with rising costs from landslide hazards in the United States that now reach over \$3 billion with an average 25 to 50 deaths per year, public officials are looking for methods to reverse this trend. Key to reducing the cost of landslide hazards is adopting non-structural mitigation measures such as sound land-use planning where land uses are planned and developments are approved after a full assessment of landslide hazards. Local land-use planners in the United States have an important role in reducing landslide hazards because they influence how land is used and developed, how buildings and other structures are sited, and where communities build their roads, parks, schools, and other public amenities. Currently most local planners in the United States lack adequate information needed to prepare regulations that minimize losses from landslides. Most local governments also lack adequate resources, both in terms of identifying landslide hazards and adopting regulations. In some states, local governments lack the authority to deal with these hazards as part of their normal land-use controls. To address these needs, the U.S. Geological Survey (USGS) and the American Planning Association (APA) developed a strategy to make information about landslide hazards available to local planners so that they can be better prepared to incorporate earth science information into the planning process. The strategy included preparing and disseminating a guidebook that would inform planners and planning officials about the importance of landslides hazards in the planning process. The resulting guidebook, "Landslide Hazards and Planning," offers planners and public officials numerous suggestions and case studies of how landslide-hazard information can be and has been made part of the local planning and development process. APA and USGS have also sponsored professional training to further educate and inform plan-

ners. The guidebook, which includes chapters on planning, zoning, and development regulations for reducing landslide hazards, is available to both APA members and non-members. Although the guidebook is designed for a U.S. audience, it can nevertheless serve as a resource for planners in other countries facing mounting costs from landslides. The process that the USGS used to enlist a professional society such as the APA to develop the guidebook and communicate with and educate its members may also be an excellent example for other countries to follow.