



Selling Community Sustainability among Political Pitfalls

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Abstract:

The cost of natural disasters continues to rise around the world, in part because of population growth, urbanization and the pressures they place on land use, and in part because policy makers continue to undervalue natural hazard risk in long-term planning. Yet these hazard are critical to community sustainability, and fundamental to the concept of resilience. The shortcoming in reducing the vulnerability of infrastructure lies partly with engineers and risk professionals, who must be aware of public perceptions of risk and political process rationality, which present inherent incompatibilities. Engineers need to know which measures of risk are most meaningful or relevant to decision makers, and then be able to communicate those risks, and the costs and benefits of mitigation, in concise, credible, meaningful terms, including low-probability, high-consequence events. This seminar will discuss three key aspects of community sustainability: acceptable and defensible discount rates, the five key issues central to effective risk and retrofit communication:, and practical rationality of elected officials. These issues provide a framework for understanding the challenges to promoting sustainability and resilience, and for developing communication strategies to overcome them.

Bio:

Ross B. Corotis, NAE, ASCE Distinguished Member, is the Denver Business Challenge Professor of Engineering at the University of Colorado at Boulder, where he was Dean of the College of Engineering and Applied Science. He studies the application of probabilistic concepts and decision perceptions, particularly societal tradeoffs for hazards in the built environment, emphasizing framing and communication of long-term risks and resiliency. He chaired the Executive Committee for IASSAR and committees on structural safety for ASCE and ACI, served on the Steering Committee for the Disasters Roundtable, was Editor of the journals Structural Safety and ASCE Journal of Engineering Mechanics, chaired the Civil Engineering Section of the National Academy of Engineering, served on the Board on Infrastructure and the Constructed Environment and chairs the Laboratory Assessment Board, and in 2007-2008 he served in the U.S. Department of State as a Science Advisor to the Secretary. He received the 2019 ASCE OPAL Lifetime Achievement Award in Education. His degrees are from MIT, and he was a professor at Northwestern University and the founding chair of the Department of Civil Engineering at The Johns Hopkins University. He is the author of 250 publications.

Monday, March 9th, 2020 4:00 – 5:00 p.m.

1310 Yeh Student Center