

**NORTHEASTERN UNIVERSITY**  
**Department of Civil and Environmental Engineering**  
**is pleased to host the**  
**COLLEGE OF ENGINEERING DISTINGUISHED SEMINAR**

## Community Resilience and the Built Environment

Chris D. Poland, SE, NAE  
Consulting Engineer  
NIST Disaster Resilience Fellow



Whether a disaster is due to natural, technological, or human-caused events, most communities will eventually recover but the extent of the recovery depends upon the nature of the event and their pre-event preparedness. Unfortunately, when disaster strikes, most communities in the United States are prepared to respond but not prepared to recover. Damage experienced by their built environment is always an unwelcome surprise.

Community resilience is the ability of a community to prepare for anticipated hazards, adapt to changing conditions, and recover rapidly from disruptions while building back better. Communities are disaster-resilient when they have a credible plan that assures the ability to govern and protect community wellbeing while providing flexibility for people to do what is needed to fully recover quickly. Power, water, transportation systems and communication networks need to begin operating shortly after the hazard event to support a well-planned recovery.

The National Institute of Standards and Technology (NIST) is developing and implementing guidelines and tools for community resilience planning. The Community Resilience Planning Guide for Buildings and Infrastructure Systems was recently published and offers a comprehensive planning approach that accounts for the support needed to restore community social functions and recognize the dependencies across infrastructure systems.

Structural Engineers need to advocate and assist in the development of their Community's Disaster Resilience Plan and then design, evaluate, and retrofit the buildings and systems they work on to meet those goals by using the available guidelines, codes and standards.

A world renowned authority on earthquake engineering and champion of disaster resilience, Chris Poland's passion for vibrant, sustainable, and healthy communities drives his consulting practice. He now focuses on community resilience and the buildings and systems that contribute to it. During his over 4 decades of professional service he served on the Board of Directors of SPUR, co-chaired their Resilient City Initiative and led the publication of "The Disaster Resilient City". He currently serves as a Disaster Resilience Fellow in the National Institute of Standards and Technology and is a member of the team of authors developing their Community Resilience Planning Guide.

Chris was inducted into the National Academy of Engineering in 2009. His structural engineering career includes hundreds of projects as well as the development of guidelines and standards that are used worldwide. He was a Senior Principal, Chairman and CEO of Degenkolb Engineers during his 40 years with the firm before retiring in 2014.

**Thursday, November 5, 2015**

**3:00 p.m. – 4:00 p.m.**

**168 Snell Engineering Center**

**360 Huntington Avenue**

**Northeastern University**

**Boston, MA 02115**

**Reception following**

**4:00 p.m. – 5:00 p.m.**

**4<sup>th</sup> Floor Lobby**

**Snell Engineering Center**



*Event is free and open to the public. Parking: Renaissance Parking Garage, 835 Columbus Avenue*



# Chris Poland

**Founder, Chris D. Poland Consulting Engineer (2014 - present)**  
**Former Chairman, CEO, Senior Principal of Degenkolb Engineers (1974 – 2014)**

## Education

- **MS, Structural Engineering, *STANFORD UNIVERSITY***
- **BS, Mathematics, Business, *UNIVERSITY OF REDLANDS***

## Professional Interests

- **Earthquake engineering**
- **Community resilience to disasters**
- **Seismic analysis of buildings**

## Selected Service and Awards

- **Member, National Academy of Engineering**
- **Member, Executive Committee, ASCE Infrastructure Resilience Division**
- **Disaster Resilience Fellow, National Institute of Standards & Technology**