Utah Chapter of EERI Short Course on Liquefaction

Course Website: http://utah.eeri.org/?page_id=184

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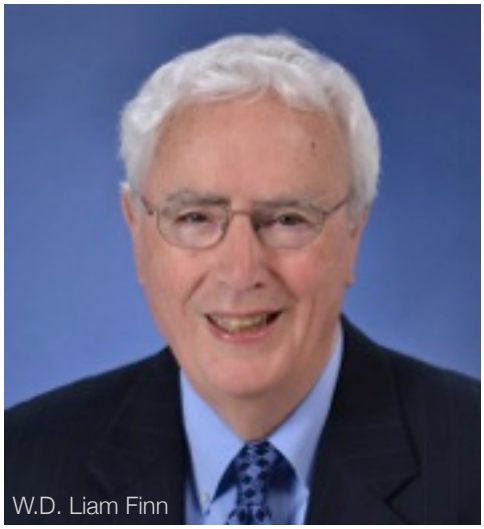
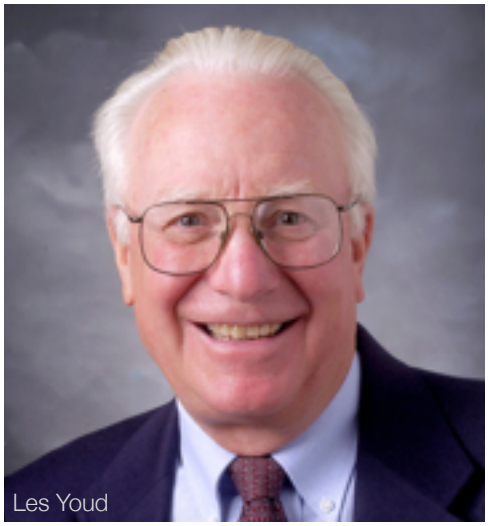


W.D. Liam Finn



Les Youd

EVALUATION AND MITIGATION OF LIQUEFACTION HAZARD FOR ENGINEERING PRACTICE

Focus Topics:

- Liquefaction Effects
- Site Characterization
- Liquefaction Analysis
- Triggering Debate
- Liquefied Shear Strength
- Soil Improvement vs Structural Mitigation
- Structural Engineering
- Lessons Learned
- Risk Considerations
- Foundation Design
- Prob. Assessment

Invited instructor: W.D. Liam Finn, Professor Emeritus of Civil Engineering, University of British Colombia

Bio: W. D. Liam Finn (National University of Ireland, 1954; M.Sc, PhD University of Washington 1957, 1960). Liam is an expert in geotechnical earthquake engineering with particular interest in liquefaction, seismic response of sites and earth structures, seismic safety evaluation of dams, seismic response of pile foundations and seismic risk.

He pioneered the use of dynamic effective stress analysis in practice and the use of large strain deformation analysis for the analysis of post liquefaction deformation of dams. Liam initiated the first program of geotechnical earthquake engineering in Canada at UBC in 1966 and pioneered the development of effective stress dynamic analysis in 1975.

Who Should Attend:

- Geotechnical and structural engineers, building and transportation officials, and risk mangers.

Purpose:

- Improve engineering practice in Utah through thorough review and discussion of state-of-the-art procedures applied by engineers to evaluate and mitigate liquefaction hazard including structural methods. Emphasis will be on urban infrastructure, including bridges, buildings and planned development.

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He currently sits on the Technical Review Board for the Seismic Retrofit of British Columbia Schools where he was a major contributor to a recently developed risk management plan for this $2 billion project that includes both structural and geotechnical mitigation methods. For this work, Liam received the Consulting Engineers of Canada award for his contribution to the seismic retrofit program for BC Schools. He was Editor of the International Journal of Soil Dynamics and Earthquake Engineering from 2000-2008 and is on editorial boards for other journals. He is a former Chairman of ISSMGE/TC-4 the Earthquake Geotechnical Engineering.

Course Syllabus:

- Deterministic Evaluation of Liquefaction Triggering - Methods and Controversial Issues
- Probabilistic Procedures for Estimating Ground Motions for Liquefaction Hazard Evaluation
- Consequences of Liquefaction - Settlement and Lateral Spread
- Geotechnical and Structural Mitigation of Liquefaction Hazard
- General Treatment of Geotechnical Ground Modification Procedures
- Detailed treatment of Structural Mitigation Measures Based on Ongoing Retrofit of Vancouver, BC schools

Speakers on selected topics:

- Loren Anderson (USU) - Liquefaction Risk Assessment
- Steve Bartlett (UofU) - Mapping of Liquefaction Risk
- Kevin Franke (BYU) - Performance Based Evaluation of Liquefaction Hazard
- Les Youd (BYU) - Damage to Shallow and Deep Foundations
- Kyle Rollins (BYU) - Design of Deep Foundations to Resist Liquefaction Effects
- Jerod Johnson (Reaveley Engineers) - Comments on Structural Mitigation

Course schedule:

7:30 am	Registration opens, continental breakfast
8:00 am	Greetings and introductions
8:15 am	Instruction by Dr. Liam Finn
10:15 am	15 minute break
12:30 pm	Lunch
1:15 pm	Presentations by selected speakers
2:45 pm	break
3:00 pm	Questions from attendees to panel of speakers
5:00 pm	Concluding remarks and closure

CoSponsoring Groups:

Utah Chapter of the GeoInstitute, Utah Seismic Safety Commission (USSC), Utah Geological Society (UGA).

Registration fees:

Online on or before April 1, 2014:

- Nonmember $250.00
- Members of Utah Chapter EERI $210.00
  Join Utah Chapter of EERI ($25.00 see utah.eeri.org to register) and then register for the short course at the member price
- Member of cosponsoring society $240.00
- Student $25.00
- Corporate or Government Group $210.00
  If 3 or more individuals from a corporation become members of the Utah Chapter of EERI ($25.00 see utah.eeri.org to register), then each member of the corporation or government agency may register at the member price.

Online after April 1, 2014, or at the door: (registration will be capped at 150 persons. Please register early to ensure a seat.)

- Nonmember, EERI Member, CoSponsoring, and Corporate/Government Rates increase by $50.00
- Student rates increase by $5.00

You can register for the short course at the following website.
http://www.brownpapertickets.com/event/597499