

# CENTRAL CHAPTER: Seismic Design of Bridges

February 7, 2012

The Central Chapter is pleased to present a full-day seminar on the topic of Seismic Design of Bridges using AASHTO LRFD. Topics to be addressed include:

1. AASHTO LRFD Approach to Dynamic Analysis
  - a. Basic Requirements of Structural Dynamics
  - b. Elastic Dynamic Responses
  - c. Inelastic Dynamic Responses
  - d. Analysis for Earthquake Loads
2. AASHTO LRFD Approach to Seismic Loads
  - a. Seismic Hazard
  - b. Site Effects
  - c. Seismic Hazard Characterization
  - d. Importance Categories
  - e. Seismic Performance Zones (National/Illinois)
  - f. Response Modification Factors
  - g. Combination of Seismic Force Effects
  - h. Calculation of Design Forces
3. Analysis and Design Example using AASHTO LRFD Approach to Dynamic Analysis
4. Analysis and Design Example using IDOT Bridge Manual Approach to Seismic Design, (both 1000 years and 500 year EQ)

Tony Shkurti, Ph.D., SE, PE, is Senior Structural Engineer and a principal engineer in HNTB's Chicago office and a nationally recognized authority in structural engineering. His research includes seismic retrofit of bridge substructures, redundancy of bridge superstructures, bracing systems, fatigue and fracture behavior of steel bridges, infrastructure security risk assessment and mitigation and vehicular impact analysis. He has presented and published in numerous venues.

**This workshop will provide 7.5 hours of continuing education.** Reservations are required and may be made by calling Donna Childs at the SEAIOI office at (312) 726-4165 x200. Continental breakfast and lunch are included in the fee.

## Registration Form

**Seismic Design of Bridges**  
**8:00am – 5:00 pm**  
**February 7, 2012**  
**Springfield, IL**

Name	E-Mail Address	Daytime Phone
Company Name		Cell Phone
Mailing Address		Yes No SEAIOI Member?
City / State / Zip		
<input type="checkbox"/> Charge to Credit Card	<input type="checkbox"/> Check Enclosed (payable to SEAIOI)	

**MAIL FORM AND PAYMENT TO:**

SEAIOI  
 134 N. LaSalle St., Ste. 1910  
 Chicago, IL 60602

Or fax your registration form to:  
 312.726.4166

No Refunds after January 31

Exp. Date	Amount Enclosed									
Signature										
<b><u>Seminar Location:</u></b>	<b><u>Seminar Fee:</u></b>									
University of Illinois at Springfield Convention Center- Room TBD	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"></td> <td style="text-align: center;"><b><u>By January 31</u></b></td> <td style="text-align: center;"><b><u>After January 31</u></b></td> </tr> <tr> <td>SEAIOI Members:</td> <td style="text-align: center;">\$200</td> <td style="text-align: center;">\$250</td> </tr> <tr> <td>Non-Members:</td> <td style="text-align: center;">\$275</td> <td style="text-align: center;">\$325</td> </tr> </table>		<b><u>By January 31</u></b>	<b><u>After January 31</u></b>	SEAIOI Members:	\$200	\$250	Non-Members:	\$275	\$325
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