



Structural Engineers Association  
OF SOUTHERN CALIFORNIA

# SEAOSC NEWS

## JOIN US!

### LA DINNER MEETING NOVEMBER 2016

Wednesday, November 2, 2016  
Networking, Dinner & Panel Presentation

Luminarias Restaurant  
3500 Ramona Blvd. Monterey Park CA 91754  
[Register Here](#)

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## STRENGTHENING OUR CITIES

SEAOSC SUMMIT  
Partnership, Performance, & Policy



### November 17 & 18, 2016

[seaosc.org/summit](http://seaosc.org/summit)

Center at Cathedral Plaza  
555 W. Temple Street  
Los Angeles, CA

- Introducing the new **Safer Cities Survey** of which SoCal cities have critical building ordinances and policies to minimizing building earthquake hazards
- SEAOSC members will receive a **FREE** copy of the Soft Story and Non-Ductile Concrete Design Guides on Day 1, a \$74 value!
- Visit [seaosc.org/2016-Program](http://seaosc.org/2016-Program) to see the full list of over 30 distinguished speakers, industry experts, and community leaders

Don't have your firm miss out on the public's increasing inquiries for engineering services and renew or register to use SEAOSC's online Engineer Finder!

**[Check it out Here!](#)**

## Have you Renewed Your Membership?

*Click Here to Renew Now!*





## Jeff Ellis, SE

### Impact!

Why do we do the job that we do? Just because, luck, money, familiarity, family, passion, or to make a positive impact? Hopefully, we do what scratches our curiosity and ignites our passion and, even better yet, we do that which makes a positive impact on more than just us. Usually we have preconceived notions and understanding based on our experience of the world and where we should focus and that for which we should strive. Indeed sometimes we don't listen and hear the interests and concerns of others and only push hard for what we feel is important from our singular, learned perception or point of view. But what happens when we stop for a minute and step back and ask the question why, listen more closely to one another, and try to more carefully communicate and not just stop there but to see how we can work together with others to make an even bigger impact. We are stronger together because of different points of view, different talents, different experience, and different contacts and networks. In order to make the biggest impact we can, we need to engage one another in honest, but respectful dialog and work to improve the profession by lifting one another up and helping each other grow and become an even greater part of the team. Team is such an important concept. Sure, individuals and individual firms can make a difference, but truly great change can come when many individuals and firms come together to share knowledge and talent, encourage one another, and work to develop a consistent approach and message for those whom we want to engage to create safer and better performing buildings and resilient communities. Some may believe that coming together and sharing knowledge and best practices may be helping their competitors. However, doing this will also help us have a broader view, work better as a profession and engage other professionals, the public and policy makers in a larger and more powerful way. This is when real and greater change will occur, rising the tide for all. There are many in SEAOSC and SEAOC who see and believe in this larger, greater vision and you can see the passion burn not just in themselves, but contagiously in their co-workers and employers. These include our younger members as well as our members and seasoned members. It's a joy and inspiration to know

them and it encourages us all to try to continue to work harder for the good of the profession, industry and our communities.

The SEAOC Convention in Maui was a very successful convention and many of you attended. A big thanks to all who made it great. There were many interesting, timely and relevant technical sessions including on efforts towards resilient communities, new analysis methods, and new technologies. Several SEAOSC members gave great presentations. I had many good and thought-provoking conversations with old and new friends and colleagues regarding the technical sessions, SEAOC and SEAOSC, and the direction and influence of our profession. Past President Michelle Kam-Biron and I gave Ashraf Habibullah, President of CSI, the SEAOSC Presidential Certificate of Appreciation in recognition of his dedicated service and contributions to SEAOSC at the CSI hosted Edward L. Wilson Honorary Dinner. Thanks to CSI for a great event. It was inspiring to see our own Bill Warren and Doug Thompson, as well as those from other SEAOC Members Organizations, be inducted into the SEAOC College of Fellows at the SEAOC Business Lunch. They have given their knowledge, experience, talents and valuable time over many years to help SEAOSC continue to grow and influence our profession and industry. The SEAOC Board met with representatives from the Structural Engineers Association of New Zealand (SESOC) and one of the statements from the President after our discussion of possible collaborative and advocacy efforts was "We're stronger together." I couldn't agree more.

The SEAOSC and SEAOC Boards have been discussing our long range plan and strategies and have identified three important areas of focus that align with our Vision and Mission; Advocacy, Technical and Membership.

Advocacy includes advocating for the structural engineering profession to inform other industry professionals and the public of who we are, what we do

and why they need to engage us to improve the safety and performance of the built environment. An important Advocacy area members have asked us to focus on is to help improve the business environment for structural engineers through research, legislation, and policy and that is an area which we have elevated. The foundation of our Association has always been Technical and we obviously will continue to focus on this important aspect as it is the blood of who we are and what we do. Finally, we are an individual Membership organization and we are striving to continue to not just provide, but to evolve the benefits of membership. If you've not seen it or have not seen it in a while, take a look at our [SEAOSC membership flyer](#) online describing these membership benefits.

We have several important upcoming events including the [Los Angeles dinner meeting](#) on Wednesday November 2nd at Luminarias. Our SEAOSC Summit Co-Chair, Annie Kao of Simpson Strong-Tie, will moderate the November 2nd dinner meeting panel discussing the recently effective [Los Angeles Seismic Retrofit Ordinance](#). The distinguished panel will include David Cocke of Structural Focus, Richard Chen of Miyamoto, and Ken O'Dell of MHP. This will be a very informative, in-depth discussion for not just those performing soft, weak or open-front wall building or non-ductile concrete building retrofits in accordance with the L.A. Ordinance, but also for those performing retrofits or developing policy for these types of buildings. Then, SEAOSC's big education and outreach event of the year, the 6th annual [SEAOSC Strengthening Our Cities Summit](#), will be held all day on Thursday November 17th and the morning of November 18th. The topics on Thursday will include seismic risk communication, practical applications of performance based design, and the SEAOSC SWOF (soft-story) and non-ductile concrete design guides. Then on Friday, the discussions will be about how policy can affect resiliency. The featured speakers at the Summit will be Dr. Lucy Jones, presenting the first [SEAOSC Safer Cities Survey](#), California Assemblyman Adrin Nazarian, and NEHRP Deputy Director Dr. Steven McCabe. The Survey assesses southern California's status regarding taking inventories of vulnerable buildings and mitigating risk through retrofit ordinances and back to business programs. SEAOSC is providing free printed copies of both the soft, weak or open-front wall building (SWOF) and non-ductile concrete building (NDC) design guides (DG) for SEAOSC members on Thursday! This is definitely the must attend event of the year and thanks to the many committee members who have worked on Summit and the Design

Guides including Annie Kao of Simpson Strong-Tie (Summit Co-Chair), Dave Williams of Degenkolb (Summit Co-Chair), Daniel Zepeda of Degenkolb (EBC/SWOF DG Chair), Russell McLellan of SGH (SWOF DG Task Group Leader), and Josh Gebelein of Brandow Johnston (NDC DG Chair). So there is much going on in October and November and our [committees](#) continue to work hard for the Association, our profession and communities. Join us to hear what's going on in our industry and communities and to lend your talent and voice to this important work.

So, to pick up again on the title of this message, why do you do what you do? Typically you will make the most impact when you do what you enjoy, what makes you curious, and for which engages your talent. But don't stop there. If you want to make the greatest IMPACT, work not only on your own skills, but work to network and collaborate with your fellow structural engineers and work to add to your skills outside of structural engineering. Go beyond the typical 8 to 5 to volunteering in SEAOSC and SEAOC to continue to build up and evolve our great association and profession, based on the foundation and framing from those passionate and talented leaders and volunteers who have come before us. Provide guidance and encouragement to others in our profession and ask for guidance or encouragement when needed; and we all need it from time to time. A book describing a philosophy to best ensure we're working on all cylinders as efficiently and effectively as possible is entitled "How Full Is Your Bucket" by Tom Rath and Donald Clifton. The theory is that each of us has a bucket that is continuously emptied or filled depending on our interaction with others and that a full bucket makes for a happy and productive person. I'm so inspired when I speak to those members and leaders in our Association hearing their passion for the industry and their desire and ideas to make a bigger difference. I encourage all to step back, listen, and think about the big picture and how we can make an enormous IMPACT on our profession, industry and community TOGETHER! I look forward to seeing and talking to you at a SEAOSC event soon!



Jeff Ellis, SE  
SEAOSC President



# SEAOC FELLOW



**Doug Thompson**  
STB Structural Engineers, Inc.  
SEAOC Fellow

## Current SEA Roles:

SEAOC Fellow  
Advisor to 2018 SEAOC Convention hosted by SEAOSC  
Director/Secretary-SEAOSC Foundation  
Member- SEAOSC Codes & Standards Committee

## Previous SEA Roles:

Past President SEAOSC 2013-2014  
Past Director SEAOSC/SEAOC Boards  
Past Chair-SEAOSC Seismology Wood Sub-Committee  
Past Chair-SEAOSC Building Code Committee  
Past Chair-SEAOSC Light Frame Performance Committee  
Past Chair-SEAOC Convention  
Past Chair-SEAOC Publications Committee



## Major Publications/Presentations:

Co-Author/Volume Manager for 7 editions of the Structural Seismic Design Manuals-SEAOC  
Co-Author for Guide to Design of Diaphragms, Chords and Collectors-NCSEA  
Co-Author for Guide to the Design of Common Irregularities in Buildings-NCSEA  
Co-Author for The Seismic Design of Wood Light-Frame Structural Diaphragm Systems-NIST/ATC  
Author of Four-story Wood Frame Structure over Podium Slab-WoodWorks  
Author of Five-story Wood Frame Structure over Podium Slab-WoodWorks

## Proudest Accomplishment:

Becoming an inductee to the College of Fellows

## Why Participate in SEA:

It turns out that I had a passion for structural engineering and didn't know it. 30 years ago and ten years after graduating from college, the founder of our structural engineering firm saw that passion in me and persuaded me to join SEAOSC and the Seismology Committee at the same time. Joining SEAOSC was by far, the best thing that happened to me in structural engineering. There are only so many things that an engineer can do in their office, SEAOC can bring out that hidden passion that you didn't know you had and take it to levels you never dreamed of doing or participating in.

# MEMBER SPOTLIGHT



## Matt Barnard, S.E.

Principal, Degenkolb Engineers

Member Since: 2007

[mbarnard@degenkolb.com](mailto:mbarnard@degenkolb.com)

**Current SEAOSC Role:** Director, and Board Contact of SEAOSC Seismology Committee

**Favorite Movie:** Usual Suspects

**Proudest Accomplishment:** Seeing former ACE students that I mentored on the Downtown LA team of ACE – Los Angeles make it in the industry.

**Childhood Ambition:** Train Engineer

**First Job:** Chemistry Tutor

**Why Join SEAOSC:** SEAOSC is the home for passionate people who are committed to helping our community and helping each other make a difference through structural engineering. No matter what excites you about what we do, there is an opportunity for you within this organization if you only choose to take advantage of it. So go ahead, take the leap, join SEAOSC, have some fun and make a difference.



## Jesse Karns, S.E.

Director of Research and Development, MiTek USA

Member Since: 2009

[jkarns@mii.com](mailto:jkarns@mii.com)

**Current SEAOSC Role:** SEAOSC Chair Seismology Committee

**Favorite Movie:** The Longest Day

**Proudest Accomplishment:** Receiving my first US Patent

**Childhood Ambition:** Becoming an Architect

**First Job:** Myers, Nelson, Houghton (later MHP)

**Why Join SEAOSC:** A chance to interact with the best and brightest engineers

# MEET CO-PILOTS

Welcome to the SEAOSC Hotline! Words spoken by our very own Jessica Dalton, whom you may have already had the pleasure to speak with on the other end of the SEAOSC phone line. All kidding aside, Co-Pilots is very excited to be of service to SEAOSC and its members. We have rolled up our sleeves and jumped right in to team SEAOSC. So far, we have had the pleasure of meeting some of you and we are looking forward to working together in promoting the wonderful world of structural engineering.

A little bit about Co-Pilots Business Services: We are administrators and it is our job to provide the support that allows SEAOSC to concentrate on implementing their vision of *"serving its members in the noble profession of structural engineering by fostering and promoting the contributions of structural engineers."* As a team, Co-Pilots understands the need for effective support to assist the organization in implementing their goals and objectives. Co-Pilots exists for this purpose alone – to be **"Your Business Co-Pilot."** We believe in strong leadership and organizational policies and it is our promise to provide the best possible service to SEAOSC, its members, and the public.

We will be seeing / talking to you soon!

The Co-Pilots Team



**Dianne Ochoa**  
Principal

Dianne has been servicing the small business and non-profit sector for the past 25 years, in various capacities, and has successfully directed the operational needs of many organizations. As an Accountant and successful business owner, she intimately understands the challenges that small businesses face. Dianne is a business expert, with emphasis in accounting and operational management.



**Jessica Dalton**  
Administrative Assistant

Jessica has been a part of the Co-Pilots team for approximately 4 years with assistance in event coordination, financial and administrative duties. Her entire work career has been centered and grounded in customer service related functions. Jessica's great attitude and willingness to support in all areas is a great asset to the Co-Pilots team.

# WELCOME NEW MEMBERS!

## Associate

Lindsay Hofgartner, Wiss, Janney, Elstner Associates, Inc., Pasadena

## Member SE

Dean Reyes, Los Angeles Dept of Building & Safety, Los Angeles

Vince De Vita, Ficcadenti Waggoner and Castle, Irvine

Peter Behnam, John Labib + Associates Structural Engineers, El Segundo

## Young Associate

David Reich, Mackintosh & Mackintosh, Los Angeles

Michael Leung, Degenkolb Engineers, Los Angeles

Alexis Cervantes Guzman, KNA Consulting Engineers, Inc., Irvine

## ENGINEERING SERVICES OF LIMITED SCOPE – VOLUNTARY AND MANDATORY PARTIAL SEISMIC RETROFIT

*The following was approved by the SEAOC Board September 24, 2016.*

Seismic retrofit work, both voluntary and mandatory, has been occurring for many years. The recent adoption of mandatory seismic retrofit ordinances by several California jurisdictions, however, has led to an increase in the frequency of requests for engineers to provide seismic evaluations and retrofit designs. While some seismic evaluations or retrofits have a broad focus encompassing the entire structure, in other cases the evaluation and retrofit is partial or targeted, meaning that it addresses one or more specific seismic vulnerabilities rather than the entire seismic force resisting system. In the latter case, the engineer provides a limited scope of services. This article provides a discussion of considerations for such a limited scope of services for seismic evaluation and retrofit work.

A limited scope of services is common when providing architectural or engineering services for existing buildings. An architect or engineer is often asked to look at a particular system or portion of a building in order to provide recommendations for improved performance, or to alter the building to accommodate a particular use. When performing any type of limited services, the design professional communicates to the owner/client the services that will and will not be provided, and if applicable, the performance target associated with the design being provided.

A professional engineer performing limited scope of service projects is guided and governed by the same criteria as when designing new construction, including the California Professional Engineers Act, applicable building codes and ordinances, and the standard of care.

### **California Professional Engineers Act**

The California Professional Engineers Act states that engineering shall be performed by licensed engineers to “safeguard life, health, property and public welfare.” A partial or targeted retrofit improving building performance would be in conformance with the Act. For example, Article 1, Division 93 of the City of Los Angeles Municipal Code (Mandatory Earthquake Hazard Reduction in Existing Wood-Frame Buildings with Soft, Weak or Open-Front Walls) begins with the following statement: “The purpose of this division is to promote public welfare and safety by reducing the risk of death or injury that may result from the effects of earthquakes on existing wood-frame multi-story building.” This wording, as well as similar phrasing found in other ordinances adopted in California, coordinates well with the Professional Engineers Act.

*Continued...*



## ENGINEERING SERVICES OF LIMITED SCOPE – VOLUNTARY AND MANDATORY PARTIAL SEISMIC RETROFIT

*Continued:*

### **Building Codes and Ordinances**

For many years, building codes and guidelines have provided guidance for partial retrofit of potential seismic vulnerabilities. A notable example is Section 3404.5 (through the 2013 Edition of the California Building Code and similar language in the 2016 California Existing Building Code), which broadly permits voluntary seismic improvements of any scope, provided that the improvements do not make a building more earthquake vulnerable. Another notable example is California Existing Building Code (CEBC) Appendix Chapter A3, which includes provisions for retrofit of cripple walls and anchorage to foundations in dwellings. These examples, as well as other similar provisions, are adopted by the State of California and implemented regularly throughout the state. Inherent in these provisions is the recognition that mitigating a single seismic vulnerability, while not addressing all potential seismic vulnerabilities, can encourage building owners and communities to engage in risk reducing seismic retrofit projects. As a result, individual occupants, building owners, and the larger community benefit from such reduced seismic risk.

### **Standard of Care**

The professional service agreements that engineers enter into with their clients often include the stipulation that the standard of care for professional services performed will be the skill level and care ordinarily used by members of the profession performing similar services and practicing under similar circumstances at the same time and in the same locality. With many engineers involved in the design of partial seismic retrofits across the state of California on a daily basis, there is ample practice from which the standard of care for this type of work can be defined.

One fundamental guiding principle within the standard of care is that partial seismic retrofit work should not increase the seismic life-safety hazard posed by the building. This concept is incorporated into the previously discussed Section 3404.5 of the California Building Code, and is fundamental to the concept of providing the benefit of reduced seismic risk.

### **Conclusions**

Partial or targeted seismic retrofits are an acceptable and established approach to reducing seismic risk. This type of limited scope of services project can be performed in accordance with the California Professional Engineers Act, applicable building codes and ordinances, and the standard of care for professional engineers. Furthermore, partial seismic retrofits can encourage building owners and communities to perform seismic retrofit projects that may not otherwise be undertaken. Partial seismic retrofits, or any other work of limited scope, requires clear communication between the engineer and owner.

## BEYOND LIFE SAFETY

Keith Porter, PE PhD University of Colorado Boulder and SPA Risk LLC

*This article reflects the opinions, positions, and commentary of the author and do not represent a consensus viewpoint of the Structural Engineers Association of Southern California.*

Here is a thought experiment to examine the adequacy of the ASCE 7's seismic performance objective that aims to protect life safety (LS). Imagine a fully code-compliant building stock in which all buildings meet ASCE 7-10 standards. Imagine it subjected to a large but not-exceedingly-rare urban earthquake, a Big One such as a Mw 7.0 rupture of the Hayward Fault. What fraction of the building stock collapses or is otherwise impaired by being red- or yellow-tagged? Now re-imagine the outcome if the building stock complied with a more-demanding code that aimed beyond life safety (BLS), such as all buildings designed with a seismic importance factor of 1.5. The strength increase would reduce both collapse potential and the chance that a new building would suffer enough earthquake damage to be rendered unsafe (which leads to red tagging) or have its use restricted (yellow tagging). One could go further and further restrict drift as required for ASCE 7 risk category IV, which could reduce post-earthquake repair costs and further enhance post-earthquake functionality. Let us examine just the collapse, red-tagging, and yellow-tagging outcomes of the strength increase, while acknowledging that a stiffness increase could probably produce large benefits.

Using only the model underlying ASCE 7-10's design maps, a USGS map of shaking, and evidence from the Northridge and Loma Prieta earthquakes about the number of impaired buildings for each collapse, one can estimate that this Hayward Fault earthquake would impair about 24% of an LS building stock or about 6% of a BLS building stock (Figure 1). Impairment of an LS building stock would drive much of the Bay Area population out of the metropolitan area, perhaps never to return, for lack of unimpaired vacancies. The BLS building stock by contrast nearly meets the urban planning organization SPUR's advice that 95% of the population should be able to shelter in place after a large earthquake. BLS design costs perhaps 1% more than LS, according to a NIST study, a FEMA study, and the judgment of experts. The 1% figure—about \$3 per square foot—should not surprise us, since the part of construction cost associated with lateral strength amounts to a small fraction of the total (Figure 2).

What would the public think of this thought experiment? The question matters because a recent philosophical inquiry, reviewed by leading engineering ethicists, concludes that ASCE's Code of Ethics implicitly obliges the civil engineering profession to make a reasonable effort to elicit the public's preferences for the seismic performance of new buildings and to reflect those preferences in design guidelines. A first-of-its kind public-opinion survey shows that people prefer BLS design and are willing to pay the 1% additional cost (Figure 3). Leaders of the Building Owners and Managers Association Greater Los Angeles expressed a desire for mandatory BLS design, while rejecting voluntary BLS design for reasons of competitiveness.

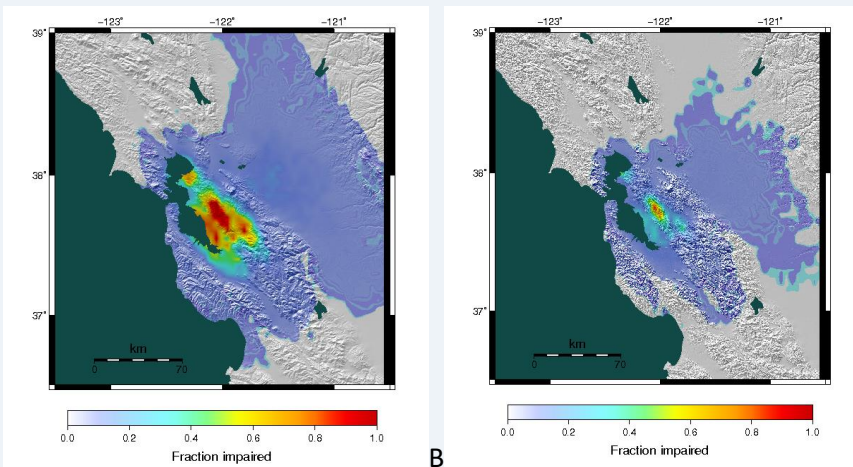
*Continued...*

## BEYOND LIFE SAFETY

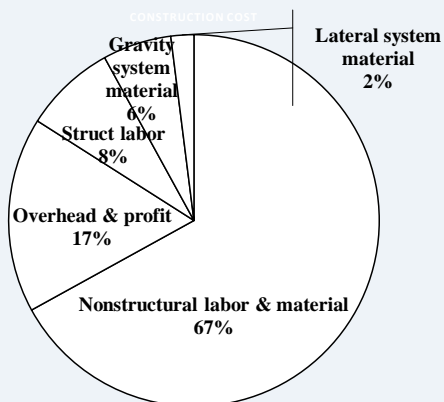
Keith Porter, PE PhD University of Colorado Boulder and SPA Risk LLC

*Continued:*

In 1980, the authors of a document that introduced load and resistance factor design to a precursor to ASCE 7 called for a profession-wide discussion of appropriate seismic safety. Let us hold that discussion, involve the public, and address four propositions: (1) ASCE 7's LS objective bakes urban catastrophe into a not-exceedingly-rare Big One. (2) Engineers have an ethical obligation to elicit the public's preferences for the seismic performance of new buildings and to reflect those preferences in design standards. (3) The public expects and can afford BLS design. (4) Even without changes to ASCE 7, communities can adopt a simple BLS modification to the code, such as treating all new occupied buildings as risk category IV or requiring new design with an importance factor of 1.5. To read more, see the 2016 SEAOC Convention paper at [www.seaoc.org/pubs/Porter-2016-SEAOC-Resilience.pdf](http://www.seaoc.org/pubs/Porter-2016-SEAOC-Resilience.pdf) and its references.



**Figure 1. How a Mw 7.0 Hayward Fault earthquake impairs buildings—meaning collapse, red tag, or yellow tag—under (A) LS design and (B) BLS design**



**Figure 2. Contribution to construction cost of a fairly ordinary lowrise office building**

## FIND AN ENGINEER

SEAOSC provides a Member Services Search service that is intended to assist the public in finding Structural Engineers (SE's) and Professional Engineers (PE's) claiming specialization in various areas of structural engineering. SEAOSC members pay a fee to advertise their "For Hire" design services on this service.

We have received an increased number of the public requesting engineer referrals and we encourage our members to participate in this valuable service! The Member Services Search is a benefit opportunity of SEAOSC membership. Please contact the [SEAOSC office](#) for further information if you are interested in participating in the Member Services Search.

The public information on the [Find An Engineer](#) section on our website is listed below:

How do you find a Structural Engineer? Read our brochure here: [WHAT YOU NEED TO KNOW ABOUT STRUCTURAL ENGINEERING](#)

Determine the size and scope of your project; you may wish to consult an architect or contractor first to discuss cost, feasibility and design coordination.

Compile a list of prospects.

- Search the Member Services Search for firms.
- Ask your friends and contractors for recommendations.
- Refer to your local telephone directory (check in the white pages, the "Yellow Pages," or in large metropolitan areas, the "Business Yellow Pages"), or
- Contact professional engineering and professional land surveying societies, such as SEAOSC, SEAONC, SEAOSD, SEA OCC, SEAOC, ASCE.

Confirm their State Registration.

- Visit the [State of California Board for Professional Engineers and Land Surveyors \(BPELSG\)](#) website and use the [Online License Look-up Database](#) to verify an individual's license, search for local professional engineers in your county, and view any disciplinary actions that have taken place against a licensee. This government agency covers many types of engineers, so be sure to look for "Professional Engineer" to view their Civil (C) or Structural (S) license.
- Review the [Consumer Guide](#) published by BPELSG for additional information on selecting a qualified engineer.

Select two or more engineering firms and ask for references from previous jobs similar to yours. Verify their expertise in your type of project and their ability to complete projects on time and on budget.

Request that an engineer visit the project site in order to submit a written proposal, including the objectives, anticipated time schedule and engineer's compensation. While some engineers do not charge for a preliminary visit, many do.

## COMMITTEE UPDATES

## SEISMOLOGY COMMITTEE

The SEAOSC Seismology Committee continues to be active over the last year addressing issues within its core mission; evaluating seismic effects on building structures and systems, review seismic design code change proposals, and disseminate information to the SEAOSC membership regarding existing and new seismic design methodologies and concepts.

Last year, the Seismology Committee set up a task group to develop and publish a design guide with examples to demonstrate the steps necessary to seismically strengthening an existing non-ductile building subject to the Los Angeles retrofit Ordinance (183893, Nov. 2015). This effort, chaired by Josh Gebelein, has resulted in an extensive document that discusses and demonstrates methodologies for the seismic evaluation and strengthening of existing non-ductile concrete buildings. In it (the design guide), you will find practical advice and guidance on implementing current evaluation and retrofit methodologies, summaries of relevant and useful reference materials, and detailed examples. As a service to our SEAOSC membership, copies of the design guide will be provided with registration to the upcoming SEAOSC Strengthening Our Cities Summit, November 17th and 18th.

Over the next two years, the Seismology Committee is looking to help in reorganizing and bring current the SEAOC Blue Book (for a 2019 release). Our hope is to provide a focus on "better performing" designs. It is envisioned that the updated Blue Book will provide a practical guide for engineers on how to use currently available performance based design methods and recommendations for implementing important research findings.

SEAOSC members who are interested in participating and would like to contribute their time should contact Jesse Karns at [jkarns@mii.com](mailto:jkarns@mii.com). The committee meets in person most every month with the ability to participate through web-meetings.

SEAOSC maintains an extensive committee structure of volunteer members developing and evaluating various structural engineering design philosophies and standards, as well as assisting building code officials in the development of building codes at the local, state and national levels.

For more information on SEAOSC Committees, visit the website [here](#).





**LA Dinner Meeting – Nov 2016**  
**LOS ANGELES RETROFIT ORDINANCE**

Wednesday, November 2, 2016  
5:30pm  
Luminarias  
3500 Ramona Blvd., Monterey Park, CA 91754  
[Click Here to Register](#)

**SEAOSC Strengthening Our Cities  
Summit 2016**

November 17 & 18, 2016  
8:00am-4:30pm & 8:00am-1:30pm  
Center at Cathedral Plaza  
Los Angeles  
[Click Here to Register](#)

**Save the Date**  
**SEAOSC Holiday Event**

Wednesday, December 7, 2016  
6:00pm  
Parker's Lighthouse  
435 Shoreline Village Drive, Long Beach, CA, 90802  
[Details Coming Soon](#)

**Save-the-Date**  
**Winter Education Program**  
**LA ORDINANCE AND THE 2016 CBC  
CODE AND STANDARD UPDATE**

Friday January 20<sup>th</sup> & 27<sup>th</sup>, 2017  
8:30am-5:00pm  
[Details Coming Soon](#)

**SEAOSC Women in Structural  
Engineering**  
**WORKSHOP PRESENTATION SKILLS**

Friday, December 2 2016  
9:30am-11:30am  
AON Building - 707 Wilshire Blvd. - Suite 2100 435  
[Click Here to Register](#)



# LA DINNER MEETING

## NOVEMBER 2016

**Wednesday, November 2, 2016**

Networking, Dinner & Panel Presentation

Luminarias Restaurant

3500 Ramona Blvd. Monterey Park CA 91754

[Register Here](#)

**Agenda:**

5:30pm-6:30pm  
Registration & Networking

6:30pm-7:00pm  
Dinner

7:00pm-8:00pm  
Panel Discussion

**Cost:**

Enroll on or before 10/26/16 for  
Early-Bird Discount

**Early Bird / Regular**

**Individual Tickets**

Members: \$45 / \$55  
Non-Member: \$55 / \$65  
Students: \$25 / \$25

**Reserve a Table of 8:**

Member: \$315 / \$385  
Non-Members: \$385 / \$455

**Exhibit/Sponsorship Opportunity**

Single Event: \$425  
Package of 4 Events: \$1500  
(limited to 10 sponsors total)

**Includes:**

- Exhibit Table
- 2 Exhibitor Tickets (incl. Dinner)
- 2 Dinner Tickets

**[Click Here to Exhibit/Sponsor](#)**

For more Information,  
[visit seaosc.org](http://visit.seaosc.org)

For help with registration,  
contact the SEAOSC Office at  
562-908-6131. We are here to  
help!

### PANEL DISCUSSION: LOS ANGELES RETROFIT ORDINANCE

At this dinner meeting, three prominent Southern California Structural Engineers will participate in a panel discussion focused on the Los Angeles Retrofit Ordinance.

The presentation will offer the engineers' perspectives of the Ordinance and share their case study experiences. The discussion will cover both the



soft story and non-ductile aspects of Ordinance and will be one you won't want to miss!

\*Photo Source: Risha Engineering

### MODERATOR

**Annie Kao**, Senior Field Engineer, Simpson Strong-Tie

### PRESENTERS

**Ken O'Dell**, Partner, MHP Structural Engineers  
**Richard Chen**, Principal, Miyamoto International  
**David Cocke**, President, Structural Focus



# STRENGTHENING OUR CITIES

SEAOSC SUMMIT

Partnership, Performance, & Policy



## November 17 & 18, 2016

### [seaosc.org/summit](http://seaosc.org/summit)

Center at Cathedral Plaza  
555 W. Temple Street  
Los Angeles, CA

- Introducing the new **Safer Cities Survey** of which SoCal cities have critical building ordinances and policies to minimizing building earthquake hazards
- SEAOSC members will receive a **FREE** copy of the Soft Story and Non-Ductile Concrete Design Guides on Day 1, a \$74 value!
- Visit [seaosc.org/2016-Program](http://seaosc.org/2016-Program) to see the full list of over 30 distinguished speakers, industry experts, and community leaders

## FEATURED SUMMIT SPEAKERS



Assemblyman  
Adrin Nazarian  
(D-Sherman Oaks)



Dr. Lucy Jones  
Seismologist & Founder of the Dr. Lucy Jones  
Center for Science and Society



Dr. Steven McCabe  
Deputy Director, NEHRP at NIST

**Sign up today to be a part of planning for a safer and more resilient Southern California!**

Thank you to our sponsors for making the Summit possible! Sponsorships still available!



SEAOSC Women in Structural Engineering is proud to present

W O  
R K  
S H  
O P

Whether you are talking one on one with a client or delivering from a stage, your audience needs to hear what you have to say. Learn how to be articulate, engaging, and professional in your speaking skills.

This workshop combines instruction with interactive elements and live coaching. It will address messaging goals, specific speaker delivery techniques, and fundamentals of motivating an audience.



April Kelcy is an award-winning speaker and emergency management consultant. She is the founder and chair of the Earthquake Country Alliance Speakers Bureau, and is a consultant to the Southern California Earthquake Center. She holds the coveted ACG Award (Advanced Communicator Gold) from Toastmasters International, which is their highest award in the public speaking track.

# PRESENTATION SKILLS

By April Kelcy  
Earthquake Country Alliance Speakers Bureau

Hosted by WALTER P MOORE  
AON Building - 707 Wilshire Blvd. - Suite 2100  
Lunch Included

RSVP at <http://seaosc.org/event-2359029>  
\$10 Registration Fee - Space is Limited

Parking at Aon Building (707 Wilshire Blvd.) is complimentary and will be validated by WPM

12  
/ 02  
9:30-11:30 am



# You and a guest are invited to *SEAOSC's Annual Holiday Event*

Wednesday, December 7, 2016

at Parkers' Lighthouse

435 Shoreline Village Drive, Long Beach, CA 90802



## Join Us for our SEAOSC Annual Holiday Dinner!

### Cocktails, Dinner & "50/50" Raffle

Raffle to benefit the upcoming Students Night scholarships

Social Hour: 6 – 7pm

Dinner: 7pm

Attire: Holiday Semi-Formal

Details Coming Soon

## Save the Date – Details Coming Soon





# SAVE-THE-DATE

## WINTER EDUCATION PROGRAM

Join Us For An Education Program on  
LA Ordinance and the 2016 CBC Code and Standard Update

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*2 Sessions:*

*Friday, January 20, 2017, 8:30am – 5:00pm*

*&*

*Friday, January 27, 2017, 8:30am-5:00pm*

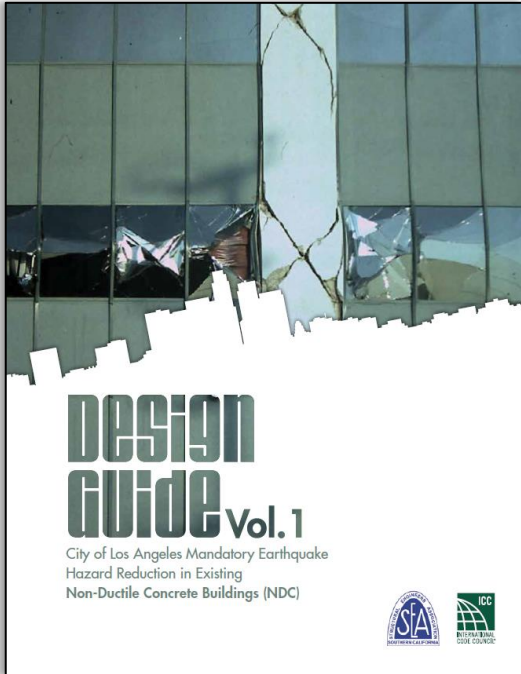
*Details Coming Soon*

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The SEAOSC Design Guides for the City of Los Angeles Mandatory Earthquake Hazard Reduction in Existing Non-Ductile Concrete Buildings (NDC) and in Existing Wood-Frame Buildings with Soft, Weak or Open-Front Walls (SWOF) are published by ICC and will be available November 17<sup>th</sup>! They are must-have references for anyone performing retrofit design in accordance with the City of L.A. seismic retrofit ordinance and will provide excellent insight and guidance for those performing retrofit design or developing policy or ordinances for these types of vulnerable buildings.

*SEAOSC will be providing free printed copies of each Design Guide to members who register for the [SEAOSC Strengthening Our Cities Summit](#), held in downtown L.A. on November 17<sup>th</sup> and 18<sup>th</sup>! Sign up now to attend and get your free copies! Afterwards they will be available for sale on the [SEAOSC](#) and [ICC](#) websites.*



This design guide discusses and demonstrates methodologies for the seismic evaluation and strengthening of existing non-ductile concrete buildings. While aspects of this guide focus on the mandatory City of Los Angeles earthquake hazard reduction ordinance and historical construction practices of the Southern California region, it is generally applicable to any other existing concrete buildings in areas of moderate or high seismicity. In this guide you will find a collection of practical advice, guidance on implementing current evaluation and retrofit methodologies, summaries of relevant and useful reference materials, and detailed examples. Additional insights are given based on the latest available research and next-generation standards development work. Extensive commentary is provided and various approaches are presented to address this challenging subject.

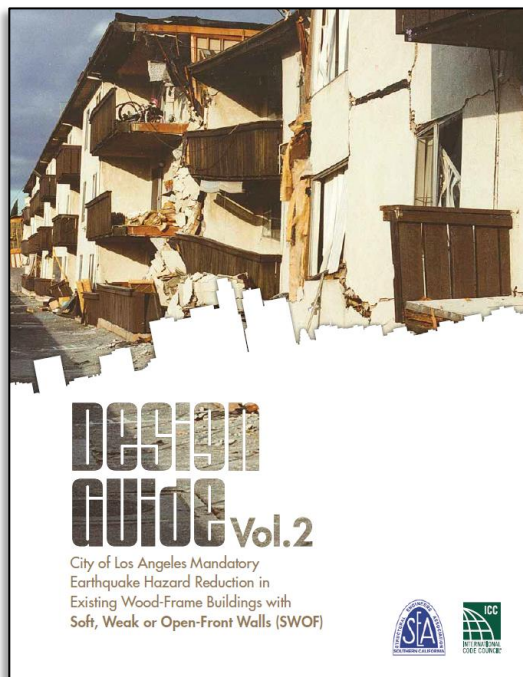
The publication of this design guide coincides with the end of the triennial code cycle, and was written for use with the 2017 *City of Los Angeles Building Code* based on the 2015 *International Building Code* and ASCE 41-13. This guide is an excellent resource for practicing professional engineers, architects, building officials, academics, and students evaluating this type of structure.

**SEAOSC Design Guide  
Vol. 1: City of Los Angeles Mandatory Earthquake Hazard Reduction in Existing Non-Ductile Concrete Buildings (NDC) Pricing:**  
**Non-Members:**  
Printed: \$45  
Electronic: \$42  
**Members:**  
Printed: \$38  
Electronic: \$35

This design guide provides an example and detailed commentary for the seismic strengthening of existing wood-frame buildings with soft, weak or open-front (SWOF) wall lines subject to the recently passed mandatory Los Angeles Ordinance. The design example in this guide demonstrates a prescriptive, ordinance-based retrofit approach for a typical open-front wall line. Following this example, a demonstration is given showing how FEMA P807 could be used to design a retrofit for the same example building.

Commentary in the guide discusses challenges inherent in this type of retrofit including: lateral force-resisting system selection, shear transfer detailing, and existing material capacities. Additionally, capacity-based design concepts are presented to provide creative solutions for buildings with unique challenges. Scope, responsibilities of the design professional, and other topics are discussed in great detail to further aid the design professional and provide a clearer understanding of the requirements of the Ordinance.

This design guide was written for use with the 2014 *City of Los Angeles Building Code* based on the 2012 *International Building Code* and ASCE 7-10. This guide is an excellent resource for practicing professional engineers, architects, building officials, academics, and students evaluating this type of structure.



**SEAOSC Design Guide  
Vol. 2: City of Los Angeles Mandatory Earthquake Hazard Reduction in Existing Wood-Frame Buildings with Soft, Weak or Open-Front Walls (SWOF) Pricing:**  
**Non-Members:**  
Printed: \$29  
Electronic: \$26  
**Members:**  
Printed: \$25  
Electronic: \$22



## SEAOSC ADVERTISEMENT & SPONSORSHIP OPPORTUNITIES

SEAOSC provides opportunities throughout the year for our industry partners to reach their target audience. There are three avenues available: advertising, exhibits and event sponsorship. Details and package discounts are available on the website. [Click Here](#) for more information.

### Newsletter Advertising

SEAOSC publishes an electronic newsletter, SEAOSC News, which is posted online at [www.seaosc.org](http://www.seaosc.org) in a color.pdf format. 11 issues are published annually on a monthly basis, with the exception of a single, combined issue for July and August. The newsletter is available on the public portion of the website.

### Website Advertising

Website banner ad with company website click-through for one month. Yearly and half-yearly banner ad packages also available. See more opportunities on the [website](#).

### Exhibit Opportunities

SEAOSC invites our corporate colleagues to exhibit at our educational events and special programs as noted below. Cost includes one 6 ft. draped table, meal for up to 2 exhibit staff, 2 complementary tickets for exhibitors to give to non-SEAOSC members who may be interested in attending.

- Student Scholarships & Job Fair (February 2017)
- Winter Education Programs (January 2017)
- Spring Education Programs (May 2017)
- SEAOSC Educational events – 4 opportunities available annually
- SEAOSC Summit (November 2016)

### Sponsorship Opportunities

SEAOSC has special opportunities for additional sponsorships, vendors, and exhibitors at additional events and seminars throughout the year. Please see the events below and check the [SEAOSC Events Calendar](#) for the most up-to-date information!

- [Student Scholarships & Job Fair \(February\)](#)
- Winter Education Programs (January)
- Spring Education Programs (April/May)
- Annual Excellence in Engineering/Past President's Award (June)
- [Annual Golf Tournament \(August 2016\)](#)
- [SEAOSC Summit \(November 2016\)](#)
- [Monthly Dinner Meetings](#)



CLASSIFIED ADS

**C.W. HOWE PARTNERS INC.**

C.W. Howe Partners Inc. is looking for an individual with a solid base of structural theory, fundamentals and design to join our team at: C. W. Howe Partners Inc., Structural and Civil Engineering Consultants.

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Please visit our website [cwhowe.com](http://cwhowe.com). If you are interested in this position after browsing our website please email your resume to: [officemanager@cwhowe.com](mailto:officemanager@cwhowe.com)

**EHLEN SPIESS & HAIGHT, INC.**

Ehlen Spiess & Haight, Inc, a Santa Barbara Structural Engineering firm is seeking an ambitious Structural Design Engineer to grow with us in our historic downtown Santa Barbara office. We have diverse projects such as hospitals, commercial, schools, seismic investigations, high-end residential, industrial and institutional projects.

Our engineers participate in all phases of projects from site investigation to analysis and design to construction administration. Our mix of projects ensures that our engineers are always taking on new challenges and gaining a wide base of experience and engineering knowledge.

We are looking for a well-rounded engineer with a strong analysis background and excellent communication skills. Preferred minimum 5-10 years of structural engineering analysis, design and detailing of buildings in California; AutoCad or Revit experience; and strong verbal and written communication skills.

Please email cover letter and resume: [ggorton@eshse.com](mailto:ggorton@eshse.com). No phone calls.

**BUEHLER & BUEHLER STRUCTURAL ENGINEERS, INC.**

Buehler & Buehler Structural Engineers, Inc. is seeking a highly motivated individual to join our management team in our Los Angeles office. B&B's growth into new regions and market sectors has created opportunities for a senior structural engineer looking to grow to a new level in their career aspirations. The successful candidate must be a California SE with 15 years' experience covering a broad spectrum of project types and an established commitment to the LA region. Candidates must possess excellent communication and relationship skills, be local to the region, and have a solid technical background, prior management experience, and the energy and drive to be part of B&B's growth in developing new opportunities in the Los Angeles area.

B&B is a progressive, design-oriented firm with a 70 year history of excellence. We are committed to continuously improve our level of service and quality of our work, and we achieve this through investing in the mentoring and professional growth of our staff. Qualified applicants are invited to submit their cover letter, resume and references to [resumes@bbse.com](mailto:resumes@bbse.com).

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**MOTIVATE. INSPIRE. LEAD.**

**November 9-11, 2016 / Ritz-Carlton, Laguna Niguel / Dana Point, CA**



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PATRICK COULIE PHOTOGRAPHY

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# Structural Engineers Association OF SOUTHERN CALIFORNIA

July 1, 2016 – June 30, 2017

The SEAOSC Board of Directors works on the behalf of our membership. If there are general or specific items you would like the Board to address or discuss please contact any of the Board members.

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jellis@strongtie.com  
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victoriaw@dpr.com  
949-955-3771

## SEAOSC Executive Director

**Dianne Ochua**

seaosc@seaosc.org

Get involved! Members are invited to join a SEAOSC committee. Please contact the chairperson for information on current projects and meeting times, dates and locations.

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<b>Building Codes &amp; Stds.</b>	Mehran Pourzanjani* Michael Ciortea Colin Kumabe	626-304-2616 213-897-0314 213-482-0447	mehran@saifulbouquet.com michael.ciortea@dgs.ca.gov colin.kumabe@lacity.org
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**Please visit**

**<http://seaosc.org/committees>**

**to view the annual committee charges and tasks.**

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