2015 Year-End Report

for the **Northern California Chapter** of the **Earthquake Engineering Research Institute**

March 2016



This document summarizes the activities conducted by the Northern California Chapter of the Earthquake Engineering Research Institute ("EERI-NC" or "the Chapter") in 2015.

EERI NC Mission & Goals

As defined in the 2015 update of the EERI-NC Strategic Plan, the mission of the Chapter is to support people with a common interest in reducing earthquake impacts in Northern California. The Chapter's vision is for a dynamic and visible Chapter with diverse membership and engaging events that helps members serve as leaders in the earthquake hazard mitigation field. Four specific goals are contained in the plan: (1) Govern Responsibly; (2) Engage Membership; (3) Share Knowledge; and (4) Have Impact. The Chapter works to achieve its goals by carrying out specific strategies and related activities. The following objectives were identified 2016 and 2017:

- 1. Increase membership by 15% per year.
- 2. Build new or deeper relationships with at least two businesses or professional groups that share an interest in reducing earthquake impacts in northern California (e.g., host a joint educational or networking event, produce a white paper).
- 3. Select and facilitate one significant volunteer action or project, ideally in partnership with an outside organization or jurisdiction.
- 4. Develop a process and prepare a plan for what the Chapter will do in the wake of a local major earthquake, potentially setting aside up to 50% of the reserve to support local post-earthquake response activities.
- 5. Update the Chapter's logo.
- 6. Streamline member communications activities, for instance by transitioning from Facebook to LinkedIn and simplifying the website and newsletter offerings.
- 7. Establish a process for tracking progress and revisiting objectives annually.

Membership in 2015

The EERI-NC Chapter had a total of 210 members in 2015, including 142 regular members, 9 student members, 22 retired members, 22 young professional members, and 4 persons who are members of only the Chapter.

The Board consisted of the following members:

President Betsy Mathieson
Past-President Heidi Tremayne
Secretary-Treasurer Marko Schotanus

Director Jeff Bond

Director Sharyl Rabinovici
Director Dana Brechwald
Director Laurence Kornfield
Director Gerry Brady
Director Ken Mark

Board meetings were held 8 times, in February, April, June, July, August, September, October and December.

Finance

No overall budget was approved for 2015, as the Board was discussing the Strategic Plan, and decided that a budget should reflect decisions made about the future of the Chapter. An operating budget for Chapter Meetings of \$2,700 was approved, and other expenses were approved individually. Chapter expenses for 2015 totaled \$7,251, and revenues \$7,875. In addition to membership dues, revenue for 2015 included donations for the student teams participating in the Seismic Design Competition collected at the February Chapter Meeting and contributions from participants in the Napa Field Trip. Use of funds from the surplus was authorized for the Albany Adopt-a-City working group, sponsorship of student participation in the Seismic Design Competition, and development of the 2016-2020 Strategic Plan.

The Chapter has typically operated within budget over its 14-year history, and has built up a surplus of about \$18,000. The Board will continue discussion of the use of the surplus in 2016.

Chapter Meetings

Catalina Fortuno, Chiara McKenney, Maryam Veisi, Michael Germeraad, Ravi Vedantham, Sahar Derakhshan, and Zahraa Saiyed served on the Events Committee in 2015. Maryam and Michael served as co-chairs. The committee operated autonomously from the board, with Director Ken Mark serving as the Board liaison, and committee members regularly attending Board meetings.

The following six Chapter meetings and one Chapter field trip took place in 2015, organized by the Events Committee:

February Chapter Meeting

Thursday, February 5, 2015

Venue: ABAG Auditorium, 101 8th Street, Oakland, CA

"5 years since the 7.0 Haiti Earthquake"

Speaker:

- Martin Hammer, Architect
- Ben Biddick, Project Engineer, KPFF
- Brian Tucker, Founder, GeoHazards International
- Tim Hart, Lead Civil and Structural Engineer, Lawrence Berkeley National Laboratory (moderator)

April Chapter Meeting

Thursday, April 16, 2015

Venue: EPICENTER, 245 Third Street, San Francisco, CA

"Earthquake Risk Mitigation, A Bridge Between Policy and Engineering"

Speakers:

- Janiele Maffei, Chief Mitigation Officer of the California Earthquake Authority
- Sharyl Rabinovici, Behavioral Scientist, Policy Analyst, and Strategy Consultant in disaster preparedness and community resilience
- Arrietta Chakos, EERI Housner Fellow and licensed Structural Engineer (moderator)

June Chapter Meeting

Thursday, June 18, 2015

Venue: ABAG Auditorium, 101 8th Street, Oakland, CA

"Let's Talk Insurance!" – annual 1906 San Francisco Earthquake anniversary meeting Speaker:

Amy Bach, Executive Director, United Policyholders

August Chapter Field Trip

Saturday, August 22, 2015

Gathering Venue: Ashby BART Station "Napa Earthquake & Winery Field Trip"

Tour guides:

- Dr. Ken Verosub, Professor, Department of Earth and Planetary Sciences, UC Davis
- Cooper Brossy, Engineering Geologist, Fugro Consultants Inc.
- Maryann Phipps, Structural Engineer, Estructure

October Chapter Meeting

Tuesday, October 7, 2015

Venue: EPICENTER, 245 Third Street, San Francisco, CA

"Soil-Structure Interaction Analysis and Applications in Modeling Deep Foundations and Tunnels" Speaker:

Roupen Donikian, Senior Engineering Manager, WSP|Parsons Brinckerhoff

November Chapter Meeting (jointly with PEER)

Thursday, November 19, 2015

Venue: Room 250, Sutardja Dai Hall (CITRIS), UC Berkeley "EERI Distinguished Lecture: Cities, Earthquakes, and Time"

Speaker:

Robert Olshansky, Professor, University of Illinois at Urbana-Champaign

December Holiday and Awards Party

Wednesday, December 2, 2015

Venue: Arup, 560 Mission St, San Francisco, CA

"Party and Chapter Awards Presentation"

The high number of meetings can be attributed to the Events Committee. Attendance ranged from 20 – 50 people for each meeting. Director Ken Mark surveyed attending members at selected meetings and wrote Chapter Meeting summaries. Surveys consistently showed positive feedback for speakers. Ken also took photos for the archives at various events.

It is the goal for 2016 to continue planning successful Chapter meetings that increase member participation.

Quarterly Shake

Director Jeff Bond was the editor-in-chief of the Chapter newsletter, the Quarterly Shake.

The goal for 2016 is to issue a newsletter in each quarter. Director Jeff Bond will continue as the editor.

YouTube and webinars

The Chapter broadcast the EERI Distinguished Lecture in November through our partnership with PEER. Recordings and webinars of meetings allow more members to learn from the programs, and provides yet another mechanism to reach the membership base.

Outreach

The board set out to increase the Chapter's role as an advocate for seismic risk reduction policy in northern California and the state. 2015 offered the following opportunity to support statewide policy initiatives:

Assembly Bill 428

Assembly Member Adrin Nazarian sponsored a bill to provide Tax Credits for seismic retrofit construction. Though supported by limited funding, and containing little information on implementation, the Board decided to send a letter of support when the Bill was approved by the Assembly and Senate, and on the Governor's desk. The Board believed that a program based on this legislation could be an important step forward toward development of a portfolio of programs and incentives necessary to address the critical need of improving seismic safety in existing buildings.

The governor vetoed the Bill.

The Chapter will continue to look for opportunities to build relationships with local jurisdictions in 2016.

Adopt-a-City Project

As an outcome of the 2011 strategic planning meeting, the Board decided to launch the "Adopt-a-City" program. Its goal is to engage in a coordinated effort to improve understanding of the risk, vulnerability and impact of a future earthquake for cities along the Hayward fault, and to empower the stakeholders within the cities to develop comprehensive and realistic measures to mitigate the cities' earthquake risk. The first city selected was Albany.

In 2015 the committee worked on finalizing the exposure model for Albany, and formulated a process on how to import it into HAZUS. Around 9 members were actively engaged in the subcommittee work in 2015, including Jeff Bond, Heidi Tremayne, Mahmoud Hachem, Keith Knudsen, Ken Mark, Maggie Ortiz, Jonathon Tai, Fabia Terra, and Marko Schotanus.

The focus for 2016 will be on performing HAZUS runs for various ground motion scenarios and shake maps, and documenting the project in a report.

Student Chapter Collaboration

The Chapter Board decided in 2013 that the ties with the local student chapters should be strengthened, so that students can more naturally transition from the student chapter to national and regional chapter activities. Three Board members were identified for 2015 to be liaisons to the 5 Bay Area EERI Student Chapters (UC Berkeley, UC Davis, San Jose State, San Francisco State, and Stanford), and collaboration with the student chapters continued.

The successful 2014 fundraising effort for participation of the student chapters in the Seismic Design Competition was repeated, this year supporting a trip to the EERI Annual Meeting in Boston. The Chapter circulated a request for donations to all its members and affiliates, and invited the participating teams to meet members at the February Chapter meeting. The Board matched the proceeds from a collection at the Chapter meeting with Chapter funds (refer to the Finance section). A total donation of \$1,000 was split between the four participating teams.

The Chapter intends to repeat the Seismic Design Competition fundraiser, and will continue to look for opportunities to build relationships with and support local student chapters in 2016.

Update of Strategic Plan

In 2015 the Board brainstormed and evaluated ideas both old and new for updating the organization's mission, strategy, and goals going forward. The result is a new 5-year strategic plan (see attached) that represents what the Board believes is a compelling vision for how to strengthen our Chapter and grow its impact on earthquake risk reduction in our region and beyond.

The December Chapter meeting yielded great feedback on member interest in various activities that could bring life to this vision. Of the seven possible initiatives discussed, members in attendance expressed the most excitement about engagement with other organizations, engaging local students, and doing local trainings so even more EERI members can help with reconnaissance after future earthquakes.

2015 Election Results

The 2015 election was held from October 20 through November 10 using the LimeSurvey software. Kate Stillwell (Chair), Marjorie Greene, Janiele Maffei, and Jack Boatwright served on the nominating committee. 89 Chapter members completed their online ballots to elect five Directors at-large, a Secretary-Treasurer, and a President-Elect. The confirmed candidates were:

- Sharyl Rabinovici (President-Elect)
- Dana Brechwald (Secretary-Treasurer)
- Ibbi Almufti
- Jeff Bond (incumbent)
- Gerry Brady (incumbent)
- Patricia Grossi
- Zahraa Saiyed

The newly elected and re-elected Board members started their terms officially at the December 2 Board Meeting. Director Laurence Kornfield, Past President Heidi Tremayne, and Secretary-Treasurer Marko Schotanus completed their final terms.

2015 "Innovation and Exemplary Practice in Earthquake Risk Reduction" Award Winners
Each year the Chapter gives two awards, to an individual and an institution, in recognition of their
hard work and dedication towards the reduction of seismic risk in northern California. The nominating
committee consisted of Keith Knudsen (Chair), Kelly Cobeen, Laurie Johnson, and Greg Deierlein. The
Chapter presented its 2015 "Innovation and Exemplary Practice in Earthquake Risk Reduction" awards
during the December 2 Holiday Party at ARUP in San Francisco. The winners were:

- Craig Comartin (individual), Structural Engineer, for his leadership and dedication in creating the
 Concrete Coalition and to advancing the practice of performance-based engineering. Throughout
 his career, Craig has been a guiding light on innovative approaches to earthquake risk mitigation
 providing focus and direction, while selflessly dedicating himself to his profession and the
 public.
- The San Francisco Public Utilities Commission's (SFPUC) Water System Improvement Program (institution), for its achievement to upgrade, repair, and replace aging water infrastructure supplying 2.6 million customers in Alameda, San Mateo and Santa Clara counties. The multi-year capital improvement program is one of the largest water infrastructure programs in the nation, and has included 83 projects at a total cost of \$4.8 billion with upgrades to both the regional and local water systems. The SFPUC showed leadership in this program by designing and building seismic resilient facilities that are expected to deliver water reliably in the event of a major earthquake within the region. To this effect, development of appropriate performance criteria that set specific water supply targets was a critical step, and now set an example for life-line system performance in support of community resilience.

2016 - 2020 Strategic Plan

for the **Northern California Chapter** of the **Earthquake Engineering Research Institute**

Introduction

This document sets out a Strategic Plan for the Northern California Chapter of the Earthquake Engineering Research Institute (EERI-NC or the Chapter). The Chapter was formed in the fall of 2001 to provide a forum for those interested in sharing information and fostering earthquake risk reduction in Northern California. This document represents an update of the 2008 plan, developed and approved by the 2015 Board of Directors. This document is intended to be updated every five years, and will be accompanied by an Action Plan, to be updated every two years.

Mission

The mission of the Northern California Chapter is to support people with a common interest in reducing earthquake impacts in Northern California.

Vision

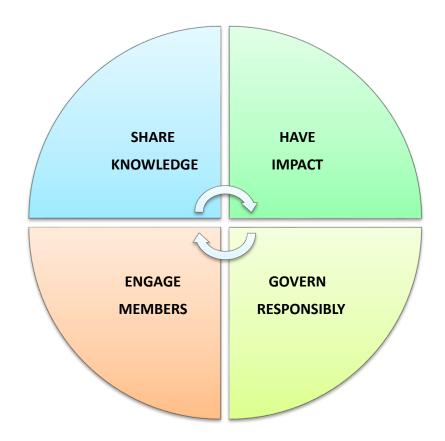
The Chapter is a dynamic and visible organization that is recognized for its contributions to improved understanding and management of earthquake risks.

Its membership is diverse in terms of experience, age, discipline, and sector, and represents some of the wide geographic terrain of Northern California. Chapter events expose attendees to a mix of knowledge-building and cutting edge ideas, stimulate healthy debate, and represent a broad range of interests. The Chapter plays a key role in cultivating the development of new leaders in the earthquake hazard mitigation field.

The Chapter has well-established relationships with other professional organizations that share an interest in disaster resilience. Through close ties with the EERI National organization and initiatives, it serves as a model for the development of other strong regional chapters. Local decision makers rely on the Chapter and its members for advice on technical information, tactics and policymaking to reduce earthquake impacts and promote disaster resilience.

Goals

In service to the mission and vision, the Chapter has four interrelated goals or "things that we do," each of which is elaborated on in the following graphic. We then give more detail about specific objectives the Chapter has related to each goal.



Goal 1 - Govern Responsibly

1a. Maintain an infrastructure to effectively support the organization's mission and goals.

1b. Wisely manage and utilize the organization's finances.

- Support EERI National in streamlining the process of membership renewals and payment of annual dues
- Maintain consistent policies and procedures for making expenditure decisions

1c. Find ways to use Chapter resources to encourage member participation (e.g., student member travel grants), promote long-term involvement (e.g., leadership development), and magnify the Chapter's visibility and impact (e.g., joint events or co-sponsorships).

Goal 2 - Engage Membership

2a: Conduct useful and timely two-way communications with members.

- Streamline member communications via an appropriate mix of modes such as email, newsletters, website, and social media
- Seek and use member input in planning and evaluating Chapter activities

- 2b. Grow the diversity and level of involvement of our membership.
 - Provide more ways for members to participate and exercise leadership in Chapter governance and events, particularly among younger and senior members

Goal 3 - Share Knowledge

3a: Conduct compelling, varied, and convenient Chapter activities.

- Provide a suite of events, field trips, and initiatives that appeal to the full variety of disciplines involved in earthquake risk reduction in the region
- 3b. Educate members about and seek to increase the use of existing risk reduction tools and strategies.
 - Serve as a reference point for members to get information about existing methods and training opportunities (e.g. educational materials, guidelines, ordinances, and regulations)

3c: Select and facilitate occasional feasible, high-reward volunteer service projects in the community.

- Cultivate and solicit ideas for projects from members and other contacts, particularly to establish a committed "champion"
- Create and supervise ad hoc committees to guide completion of special projects, with clear end goals and a charge that is reviewed annually

Goal 4 – Have Impact

- 4a. Proactively engage the wider public in seeking to understand and address earthquake risks.
 - Develop new or deepen existing relationships between the Chapter and other entities who share the common goal of increasing disaster resilience
 - Meet with and present to outside groups that inquire about earthquake risk
 - Acknowledge and increase the visibility of successful risk reduction efforts through awards or other recognition
- 4b. Appropriately advocate for earthquake risk reduction to decision-makers.
 - Support national EERI Policy Committee initiatives, such as tracking legislative activity related to earthquakes and developing policy positions
 - Participate in timely advocacy, such as consideration and, if desired, recommendation of sensible efforts to reduce risk (e.g. ballot measures, legislative proposals)
 - Assist and advise local governments or the media when invited or when opportunities arise, such as following a major earthquake

Specific Objectives for Fiscal Year 2016 & 2017:

- 1. Increase membership by 15% per year.
- 2. Build new or deeper relationships with at least two businesses or professional groups that share an interest in reducing earthquake impacts in northern California (e.g., host a joint educational or networking event, produce a white paper).
- 3. Select and facilitate one significant volunteer action or project, ideally in partnership with an outside organization or jurisdiction.
- 4. Develop a process and prepare a plan for what the Chapter will do in the wake of a local major earthquake, potentially setting aside up to 50% of the reserve to support local post-earthquake response activities.
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