School Earthquake Safety Initiative

promoting safe buildings for school children

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About EERI

• Global earthquake engineering institute
• Nonprofit, technical membership society
• Dedicated to reducing earthquake risk
EERI’s Mission

EERI’s mission is to reduce earthquake risk by:

1. Advancing the science and practice of earthquake engineering
2. Improving understanding of the impact of earthquakes
3. Advocating comprehensive and realistic measures for reducing earthquake effects
What is SESI?
• SESI is a global and collaborative network of diverse, expert, and passionate professionals who are committed to creating and sharing knowledge and tools that enable progressive, informed decision making around school earthquake safety.

Our Goal:
• Leverage our extensive expertise and reputation to conduct regionally appropriate actions that make a tangible and positive difference in communities around the world, by protecting the lives of all who inhabit school buildings.

Our Vision:
• Serving the world as a leader in the science, public policy, and advocacy of school earthquake safety.
The SESI Network

Affiliation Types for SESI Participants

- Practitioner: 28.1%
- Academic: 28.1%
- Misc: 7.9%
- Government: 11.4%
- Retired: 5.7%
- School District: 5.7%
- Media: 4.5%

Discipline Types for SESI Members

- Business: 19.3%
- Structural Engineering: 6.6%
- Unknown: 5.7%
- Geology: 5.7%
- Seismology: 5.7%
- Emergency Management: 11.4%
- Technical: 6.6%
- Urban Planning: 6.6%
- Geotechnical Engineering: 6.6%
- Civil: 6.6%
- Public Policy: 6.6%
- School Administration/Teaching: 6.6%
- Insurance: 6.6%
- Media: 6.6%
- School Parent & Advocate: 6.6%
- Tsunami: 6.6%
- Architect: 29.4%

100+ members
SESI Subcommittees

• **Classroom Education & Outreach**
  
  **Chairs:** Thalia Anagnos & Lelli Van Den Einde
  
  **Charge:** Use classroom education to develop advocates for earthquake school safety.

• **Tsunami Mitigation for Schools**
  
  **Current Contact:** Yumei Wang
  
  **Charge:** Support schools with tsunami hazard by provide them access to experts and sharing best practices for tsunami risk mitigation.
SESI Subcommittees

• **Safety Screening, Inventory, and Evaluation**
  
  **Chairs:** Ken Goettel
  
  **Charge:** Promote use of screening methodologies to efficiently identify school buildings with seismic risk.

• **Code Updating and Improvements**
  
  **Chairs:** Rob Jackson
  
  **Charge:** Advocate for code improvements and implementation practices that will enhance school safety.

New Havens Elementary School, Piedmont, California was retrofitted in 2012.

Portland, Oregon’s Franklin High School will be rebuilt using school bonds approved in 2012.
2016 Accomplishments

1. New email list to communicate with SESI members.
2. Webinar series to share school safety best practices.
3. Classroom outreach curriculum finalized and used in two pilot locations in California.
5. U.S. schools in tsunami hazard zones identified and outreach plans being developed.
6. EERI Policy Statements about school safety developed and adopted for advocacy to stakeholders.
EERI Policy Statements about Schools

Schools shall be URM FREE by 2033

“To keep students safe, school buildings must be ‘URM free by 2033’ in regions with high and moderate earthquake hazard.”

- Establish programs to identify URM school buildings and prioritize them for retrofit or replacement.
- Establish funding mechanisms, financial assistance, and incentives to finance the retrofit or replacement of URM school buildings.
- Establish funded programs to set criteria and standards, allocate funding, and ensure quality compliance of all school retrofit or replacement projects.
- Require structural upgrades to or replacement of all actively used URM school buildings by 2033.
EERI Policy Statements about Schools

Mitigation of Nonstructural Hazards in Schools

“Students should be kept safe from injury from falling nonstructural items in school buildings in regions with high and moderate earthquake hazard.”

• Establish programs to identify, prioritize, and mitigate nonstructural and contents hazards in schools.
• Establish funding mechanisms & financial incentives to finance mitigation of nonstructural/contents hazards.
• Require nonstructural anchoring and bracing of potential falling hazards to ensure safe egress from schools after earthquakes.
• Prioritize anchoring and bracing of recovery-critical nonstructural components to ensure acceptable recovery of normal school functions.
How Can I Contribute?

• Subscribe to our mailing list: https://www.eeri.org/projects/schools/lesi-mailing-list/
• Best practices webinars
• Contact Barry Welliver, Subcommittee Chairs, or Heidi Tremayne to get involved.

eeri.org/schools