Committee on Social Responsibility (ACSR)

Formed during Forum 16, Aug 2011, Danang, Vietnam

Aims & Objectives of ACSR:
- To discuss the importance of Social Responsibility
- To discuss the role of ARCASIA Architects in SR related issues
- To integrate ACSR Program with other ARCASIA Committees
- To establish SR Action Plans amongst ARCASIA Member Institutes
Committee on Social Responsibility (ACSR)

Proposed Topics:

- Climate Change
- Natural Disasters
- Disaster Prevention, Preparedness & Risk Reduction
- Aging Population
- Universal Design (Inclusive Design for All)
- Architecture for Humanity
- Social Housing and Livable Conditions
- Heritage and Cultural Conservation
ACSR Symposium
Kathmandu 2013
“Social responsibility is something very next and having a charter will help convince governments and clients about what they should be doing.”

“We shouldn’t be dealing with only rich clients and corporations but we should be able to serve the other spectrum as well where there are the needy.”

Preparedness is the only way we can combat a natural disaster.
— John Quigley

Experts stress on the need for the government to wake up to the imminent threat of a major quake hitting Nepal.
ACSR Initiatives

- ARCASIA Emergency Architects (AEA)

- ARCASIA Charter on Social Responsibility
Types of Natural Disasters

- Flood
- Earthquake
- Landslide
- Tsunami
- Wildfire
- Typhoon
- Drought
- Nuclear
Thailand Floods 2011

Property damage: 1,425 billion baht (US$45.7 Bn)

Deaths: 815

Date: Jul 2011 – Jan 2012 (175 days)

Location: 65 of Thailand's 77 Provinces
Black Saturday Bush Fires  Victoria 2009
Typhoon Haiyan 2013

Total fatalities: 6,340

Highest wind speed: 315 km/h

Date: 2-11 Nov 2013

Category: Category 5 Super Typhoon

Affected areas: Philippines, Micronesia, Vietnam
United States

2005 - 2008

5 Hurricanes

Louisiana
Mississippi
Alabama
Kentucky
Georgia
Taiwan

21 May 1999

Taiwan

7.3 on Richter scale
2,378 deaths
6,534 casualties
40,845 homes destroyed
41,373 damaged
Kobe Japan

17 January 1995

Kobe Japan

7.2 on Richter scale
6,434 deaths
43,792 casualties
320,000 rehoused
Shigeru Ban: paper log house
512 Sichuan Earthquake

12 May 2012
Wenchuan, Sichuan Province, China
8.0 on Richter scale
Over 100,000 casualties
Over 80% buildings were destroyed
Nepal Earthquake - April 2015
Nepal Earthquake

7.8 magnitude earthquake devastated many parts of Nepal on 25th April 2015

Nepal lost more than 8,000 people with 15,000 injured

300,000 homes and 15,000 schools destroyed
Loss of Heritage and Cultural Monuments
A Better Way to Rebuild Nepal

The post disaster reconstruction can help end, not fuel, aid dependency
Nepal Needs

- Nepal says it needs around $6.7 billion to recover from the April disaster, which killed more than 8,800 people, destroyed nearly half a million houses and left thousands in need of food, clean water and shelter.

- In total, more than three-quarters of the buildings in Nepal’s capital, Kathmandu, are uninhabitable or unsafe. Government officials have tallied 153,000 buildings in ruins across the country, with 170,000 more damaged.

- Estimates of post-quake reconstruction run as high as $10 billion, about half of the country’s annual economic output.
Reasons for Establishing Emergency Architects

Over past decades, the number of natural disasters has increased tremendously. Each month a new disaster occurs somewhere in the world causing huge damage to the infrastructure and also to the economy.

Emergency architects working with governments and international NGOs craft new shelters for the homeless affected by hurricanes, earthquake, tsunamis, armed conflicts, floods, chemical explosions and other catastrophes.

The main function includes emergency architecture planning and project management services for disaster reconstruction and development.

A number of emergency architect organizations also facilitate construction volunteering.
What is an Emergency Architect?

Emergency architects are professional experts who offer their services for areas that are affected by natural disasters or armed conflicts.

Many non-profit, private and government organizations collaborated with architecture firms to help in development of the affected areas.
Architects, planners, and engineers have used their professional expertise (knowledge of risk prevention and of building) to provide sustainable and appropriate assistance to the populations affected by technological (chemical factory explosion), human (civil) and natural disasters (tsunami, earthquake).

Always work with local populations and use local materials in their buildings.
Advantages

The role of emergency architects is to facilitate growth from within the community, improve the current infrastructure and enhance the sustainable growth. It often encourages active community participation by contributing their significant services to help sheltering the victims of natural disasters.

Today, the emergency architect has become one of the most promising and influencing domain for the nations throughout the world especially for those who are more vulnerable towards the natural catastrophic situations.
Emergency Architects globally

Emergency Architects Foundation (EAF)
created by Patrick Coulombel (architect) in Amiens France in April 2001

Emergency Architects Australia (EAA)
was started in 2005

Emergency Architects Canada (EAC)
was founded in 2007

Emergency Architects has already led 28 actions in 24 countries
made more than 39,600 assessments and about 8,500 buildings
The main objectives of ARCASIA Emergency Architects are:

to support and develop architects' humanitarian engagement in Asia Pacific, thus to contribute to the development of architecture

to train architects with skills to help populations affected by natural, technological or human disasters

to preserve and promote architectural, historical and cultural world heritage
Rebuilding

Help to rebuild sustainable and decent housing and restore basic economic and education infrastructure

Re-house displaced populations
Risk Prevention

Analyse relevant environmental, urban, technological and architectural factors with regards to rebuilding safely
Preserve traditional know-how while adding features to make them resilient and resistant to future disasters.
Promote the Training of Locals
from masons to architects

Masons
Carpenters
Electricians
Plumbers
Planners
Architect
Engineers
Publications on Quake Design
Disaster Assistance Handbook

Third Edition, March 2017

AIA

Get involved with disaster assistance

Before

Connect with your local Disaster Assistance Program through national and local AIA chapters.

Coordinate with your state or local chapter to facilitate the coordination of a State Disaster Assistance Program. Learn the disaster assistance essentials on page 14.

Develop relationships with state officials and the community’s needs in advance of a disaster.

Build a broad geographic network of volunteers.

When disaster strikes, and news websites and social media will be flooded with news about their own families, homes, and businesses, learn about volunteer activation on page 39.

During

Confirm that a request for disaster assistance has been made by the authority.

Learn what certifications and training you need to serve your community in an emergency on page 79.

Protect your personal safety and professional liability if you are volunteering in a disaster response effort.

Compare your insurer’s Good Samaritan legislation on page 69.

After

Understand local recovery challenges and community needs.

Prevent the next round from becoming disasters.

Renew your community by choosing wisely to rebuild, revitalize, or reallocate.

Learn about recovery options on page 91.

Reduce risk of disaster by evaluating how vulnerable you and your clients are.

Participate in community hazard, disaster recovery and resilience planning and policy efforts to create a more sustainable community.

Learn policy efforts outlined on page 22.

Anytime

For full access, visit AIA.ORG/DisasterAssistanceHandbook
AIA's Disaster Assistance Program

AIA Architects Respond to Disasters

Architects can use their building knowledge to help their communities both before and after a disaster. AIA's Disaster Assistance Program supports Components and equips architects with the knowledge and skills to mitigate, prepare for, respond to, and recover from a disaster.

Since 1972, the program has ensured that AIA, Chapters, and members are prepared to assist communities nationwide and internationally in leadership and volunteer roles. At the request of a state or local jurisdiction, our members are trained to serve as volunteers to perform rapid or building safety assessments in their communities following a disaster.

Learn about the important role of architects in disasters

Want to prepare for the hazards in your own back yard and be ready to respond as a “citizen architect” to help your community recover from a hazard event? Connect with your local or state AIA chapter to inquire about your state’s disaster assistance program. A directory of chapter committees can be found in the Appendix of the 3rd Edition of the AIA Disaster Assistance Handbook.

Disaster Assistance Program

The AIA Disaster Assistance Program supports chapters and equips architects with the knowledge and skills to mitigate, prepare for, respond to, and recover from a disaster. Since 1972, the program has ensured that AIA, Chapters, and members are prepared to assist communities nationwide and internationally in leadership and volunteer roles.

Register for a Safety Assessment Program training in your area
HISTORY OF AIA DISASTER ASSISTANCE

- **1972**: AIA formally recognizes the role of architects in emergency response.
- **1974**: The Disaster Relief Act of 1974 establishes the presidential declaration process for federal disaster aid.
- **1978**: The Federal Emergency Management Agency (FEMA) is created as an independent agency.
- **1998**: Congress passes the Stafford Act to codify the federal role in disaster assistance and improve planning, preparedness, and coordination.
- **2005**: Hurricane Katrina strikes the United States, raising awareness of disaster risk in the built environment.
- **2006**: AIA establishes the Disaster Assistance Program and appoints a Disaster Assistance Committee to lead the charge.
- **2008**: AIA creates the Disaster Assistance: Comprehensive Response System.
- **2008**: AIA develops model Code Evaluation legislation for licensed architects.
- **2009**: AIA Disaster Assistance Committee launches the AIA Safety Assessment Program, uniformly training architects, engineers, and building inspectors in post-disaster building assessments.
- **2010**: AIA Disaster Assistance Committee launches AIA State Disaster Coordinator Network to facilitate AIA engagement in disaster preparedness and response efforts on a state level.
- **2011**: AIA joins the BuildOn Coalition of designers, first responders, and insurance industry representatives to advocate for safer building codes and improvements to federal disaster programs.
- **2012**: AIA partners with the former American Institute of Architects Division to offer the AIA/AFPH Disaster Response Plan Grant to empower chapters to work with local government agencies on planning, training, and other critical disaster relief initiatives.
- **2013**: AIA hosts the Designing Recovery Competition, an ideas competition aimed at designing disaster-responsive homes for New York City, NY, New Orleans, LA, and Joplin, Mo.
- **2014**: AIA Board of Directors adopts position statement on resilience to address the impacts of an increasing number of natural disasters, climate change, environmental degradation, and population growth.
- **2017**: AIA co-authors the Building Industry Statement on Resilience, a guiding document for industry leaders to enhance the resilience of the built environment.
SAP Training

Post-disaster Safety-Assessment Program (SAP) training provides architects, engineers, and building inspectors with the knowledge to provide evaluations of facilities and buildings in the aftermath of a disaster.

ELIGIBLE PARTICIPANTS

All building industry professionals are welcome and will receive a class attendance certificate. In addition, certain licensed practitioners will be eligible to perform post-disaster assessments after successfully completing SAP training as certified Building Evaluators:

- Licensed architects
- Registered civil, structural, or geotechnical engineers
- Certified building inspectors

CERTIFICATION PROCESS

In 2008 AIA adopted and adopted California’s Office of Emergency Services (Cal OES) Safety Assessment Program (SAP) as the official AIA all-hazards post-disaster training.

After successfully completing AIA’s SAP training, eligible individuals will earn a California-issued registration ID card. This nationally recognized certification is often required training for volunteer building safety evaluators nationwide.

PROGRAM DETAILS

This full-day, in-person, all-hazards, training course will include the SAP Building Evacuation Manual. Attendees will receive one field manual from the Applied Technology Council (ATC):


AIA SAP instructors will share personal experiences from the field and will walk attendees through interactive case studies. Attendees will understand chain of command in declared disasters and safety precautions to deploy into the field.

6.5 AIA/HSW CEUs will be earned.

ENGAGE

Interested in attending a training in your area? Contact resilience@iaa.org
Community Resilience Planning Resources

Planning resources for local planners to define vulnerabilities, involve community members, and design for resiliency.

Find by Planning Topic
- Vulnerable Populations
- Design Thinking
- Collaboration
- Community Engagement
- Tools and Assessments
- Performance Measurement
- Funding and Program Alignment

Resilient Design Solutions

Climate Change Adaptation and Resilience Case Studies Series
This case study series highlights climate change adaptation and resilience work in the transportation sector.
Date Published: July 2016

North Atlantic Coast Comprehensive Study Report
This report provides communities information on changing flood risks associated with climate change. It also provides tools to help communities prepare for future flood risks.
Date Published: January 2015
Community Resilience Planning Guide

Natural, technological, and human-caused hazards take a high toll on communities, but the costs in lives, livelihoods and quality of life can be reduced by better managing disaster risks. Planning and implementing prioritized measures can strengthen resilience and improve a community’s abilities to continue or restore vital services in a more timely way, and to build back better after damaging events. This makes them better prepared for future events and more attractive to businesses and residents alike.

The NIST Community Resilience Planning Guide for Buildings and Infrastructure Systems (guides) provides a practical and flexible approach to help all communities improve their resilience by setting priorities and allocating resources to manage risks for their prevailing hazards. Volume I of the guide describes the six-step planning process and provides a worked example to illustrate the process. Volume II is a resource that examines how to characterize the social and economic dimensions of the community, dependencies and cascading consequences, and building and infrastructure performance. Using the Guide can help communities to integrate consistent resilience goals into their comprehensive, economic development, zoning, mitigation, and other local planning activities that impact buildings, public utilities, and other infrastructure systems.

The Guide’s six-step process helps communities to think through and plan for their social and economic needs, their particular hazard risks, and recovery of the built environment by:

- Setting performance goals for vital social functions—healthcare, education and public safety—and supporting buildings and infrastructure systems: transportation, energy, communications, and water and wastewater;
- Recognizing that the community’s social and economic needs and functions should drive goal setting for how the built environment performs;
- Providing a comprehensive method to align community priorities and resources with resilience goals.

A fictional community, Riverbend, illustrates the six-step process and how resilience can be integrated into community planning.

The Guide was released in late 2016 and is being supplemented by Community Briefs with more information on supporting methods and best practices.

Published on April 2017, updated December 11, 2018
Sendai Framework for Disaster Risk Reduction 2015-2030

Contents

Preamble
Expected outcome and goal
Guiding principles
Priorities for action
Priority 1: Understanding disaster risk
Priority 2: Strengthening disaster risk governance to manage disaster risk
Priority 3: Investing in disaster risk reduction for resilience
Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction
Role of stakeholders
International cooperation and global partnership
Build Back Better

PolyU–The United Nations Office for Disaster Risk Reduction Collaboration Programme

Wednesday, 2 December 2015
9:30 a.m.
Room M1803, 18/F, Li Ka Shing Tower, The Hong Kong Polytechnic University
Hung Hom, Kowloon, Hong Kong

Global Assessment Report on Disaster Risk Reduction

2015

Making Development Sustainable: The Future of Disaster Risk Management
Now in its fourth year, the Disaster Preparedness Forum will address the need to develop disaster resilient homes and schools for vulnerable communities in Asia at scale. This year’s theme “Build Better Now” reflects the significant economic losses and damages in the region due to disasters. It will focus on the need for more strategic and greater investment to make our communities safe and resilient to the devastating impact of disasters.

This one-day event will convene thought leaders, innovators and practitioners from across the region that are helping to progress the vision of disaster resilient homes and schools in Asia. Speakers and participants from government, humanitarian and business sectors will convene to address the fundamental questions and identify potential solutions to the perennial challenge associated with this theme.
ARCASIA signed a **Memorandum of Understanding (MoU)** with **Asian Disaster Preparedness Center** in Ayutthaya in November 2015.
<table>
<thead>
<tr>
<th>Courses - adpc</th>
<th>One-day Course</th>
<th>Four-day T4T Course</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction to disaster risk management</strong></td>
<td><strong>Introduction to disaster risk management</strong></td>
<td></td>
</tr>
<tr>
<td><strong>The role of architects in DRR</strong></td>
<td><strong>How to train the trainer using this course</strong></td>
<td></td>
</tr>
<tr>
<td><strong>How can architects help? Preparedness via building codes and regulations. Regional/National emergency response mechanism</strong></td>
<td><strong>The disaster cycle: mitigation, preparedness, relief, reconstruction.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>The build back better concept and case studies from previous disasters</strong></td>
<td><strong>The role of architects across the disaster cycle:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Mitigation - safe design, building codes, upgrading, retrofitting</td>
<td>- Mitigation - safe design, building codes, upgrading, retrofitting</td>
</tr>
<tr>
<td></td>
<td>- Preparedness – adaptive design, promoting skills within the community</td>
<td>- Preparedness – adaptive design, promoting skills within the community</td>
</tr>
<tr>
<td></td>
<td>- Relief - temporary shelters, specific needs (gender, disability)</td>
<td>- Relief - temporary shelters, specific needs (gender, disability)</td>
</tr>
<tr>
<td></td>
<td>- Reconstruction – building back better, working with communities, community-led design, interdisciplinary working with other service providers, universal design</td>
<td>- Reconstruction – building back better, working with communities, community-led design, interdisciplinary working with other service providers, universal design</td>
</tr>
<tr>
<td></td>
<td><strong>Hazard specific concepts:</strong> Earthquake, Flood, Drought/water table change/subsidence, Slopes, Storms, Fire</td>
<td><strong>Hazard specific concepts:</strong> Earthquake, Flood, Drought/water table change/subsidence, Slopes, Storms, Fire</td>
</tr>
<tr>
<td></td>
<td><strong>Dynamics:</strong> Climate change, Land use and urbanization, Universal design</td>
<td><strong>Dynamics:</strong> Climate change, Land use and urbanization, Universal design</td>
</tr>
<tr>
<td></td>
<td><strong>Case studies from earlier disaster response, the dos and don’ts</strong></td>
<td><strong>Case studies from earlier disaster response, the dos and don’ts</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Further information – signposting</strong></td>
<td><strong>Further information – signposting</strong></td>
</tr>
</tbody>
</table>
Potential Partners

Habitat for Humanity
Rebuild Homes for Nepalese Earthquake Victims

Amity Foundation
Relief Efforts

Architecture for Humanity
Potential International Partners

International Union of Architects (UIA)

UN - Economic & Social Commission for Asia and the Pacific (UN-ESCAP)

Rehabilitation International (RI)

RI Task Force on Disability-inclusive Disaster Risk Reduction (DiDRR)
Helping Hand
Thank you

Ar. Joseph Kwan MH
FRAIA  RIBA  FHKIA  Assoc. AIA Hong Kong
APEC Architect  IFMA  BEAM Pro

ACSR Chair  2011-14

jkuda@netvigator.com