



## Build Change Statement of Qualifications Architectural and Engineering Services

August 2017





To Whom It May Concern:

Build Change is pleased to share this Statement of Qualifications for Architectural and Engineering Services.

Build Change has extensive international experience providing engineering, capacity development, and institutional strengthening for safe housing and schools in disaster-prone emerging nations. Over 23,000 people in Bhutan, China, Colombia, Guatemala, Haiti, Indonesia, Nepal, and the Philippines have been trained on disaster-resistant design and construction and have in turn built 47,000 safer buildings. In the process, Build Change has created more than 11,000 jobs.

Build Change works in partnership with governments at the ministry and municipal levels to develop and implement building standards for disaster-resistant construction.

Build Change is a leader in providing training and technical assistance for building safe buildings in emerging nations and empowering women as engineers and leaders of reconstruction. Build Change has written three primers on these topics at the request of USAID and have implemented programs funded by USAID in four countries.

Please find enclosed a Statement of Qualifications for Architectural and Engineering Services, which includes a firm profile, details about past projects, key personnel, past clients and partners, awards, notable press, and success stories. Build Change is excited for the opportunity to discuss a further partnership.

Please do not hesitate to contact me should you have any questions.

Very truly yours,

Elizabeth Hausler, Ph.D.

Founder & CEO

Build Change





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## Firm Profile

### Build Change has/is:

- Proven engineering and capacity building excellence in assessment, design, construction, and retrofitting of vertical structures in challenging post-disaster environments.
- A global leader in the relief/international development world of permanent housing reconstruction after earthquakes and typhoons, winner of numerous awards, and author of three USAID primers.
- A model that overcomes the barriers to development: money, technology, and people, using innovative models to leverage financing and other incentives for safe construction.
- A history of empowering women, as managers, engineers, and stewards of the safe construction of their home.
- An organizational approach based on transparency and cooperation; often working at the nexus of government, private sector, NGO, donor, and end user communities.
- A champion of local capacity building and job creation, recognizing these are keys to sustainable development in emerging markets.
- A record of delivering successful high impact, low cost per impact programs for USAID in 4 countries after 4 natural disasters, and other partners from the public, private, and NGO sectors.
- Forward-looking approach to technology innovation, implementing tablet-based methods for collecting data and limiting opportunities for corruption and error in construction supervision.





## Firm Profile (Continued)

### Services Provided, for Low-Rise Vertical Structures in Natural Hazard Prone Areas, New Buildings and Retrofitting:

- Site hazard assessment and mitigation
- Damage assessment
- Structural and seismic building assessments
- New construction design and design review
- Existing building structural rehabilitation design
- Building code and guideline development
- Cost estimation
- Construction oversight
- Training and capacity building
- Public-private partnership models
- Resettlement
- Policy, legal, and regulatory frameworks
- Financing and insurance incentives
- Data and information management

## Firm Profile (Continued)

### Goals:



**Safe Houses.** Build Change believes that all homeowners, regardless of their income and education, have the right to a house that will protect their family from natural disasters. We also believe that homeowners should lead the process. Our homeowner-driven reconstruction and retrofitting approach enables vulnerable families to live in safe houses.



**Safe Schools.** Natural disasters can have devastating effects on children's safety and disrupt their education. To keep thousands of children safe, Build Change partners with corporations, organizations, and governments to make changes to school design, improve construction quality and evaluate and retrofit existing schools.



**Trained Construction Workforce.** Build Change trains everyone involved in the design and construction of safe buildings, including engineers, builders, building materials producers, vocational teachers, students, and municipal officials. Build Change employs local engineers and construction professionals.



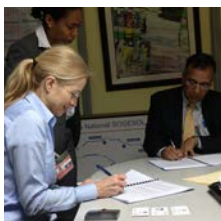
**Better Building Materials and More Jobs.** Poor-quality building materials contribute to building collapses during disasters. Build Change works with local businesses with three goals: improve building materials quality, increase jobs and incomes, and reduce environmental impacts.



**Engaged Private Sector.** Build Change partners with corporations and financial institutions to provide incentive-based financing and insurance products.



**Empowered Governments.** Build Change works with local governments to build their capacity to produce and use simple building guidelines and to train their engineers to implement and enforce these standards.

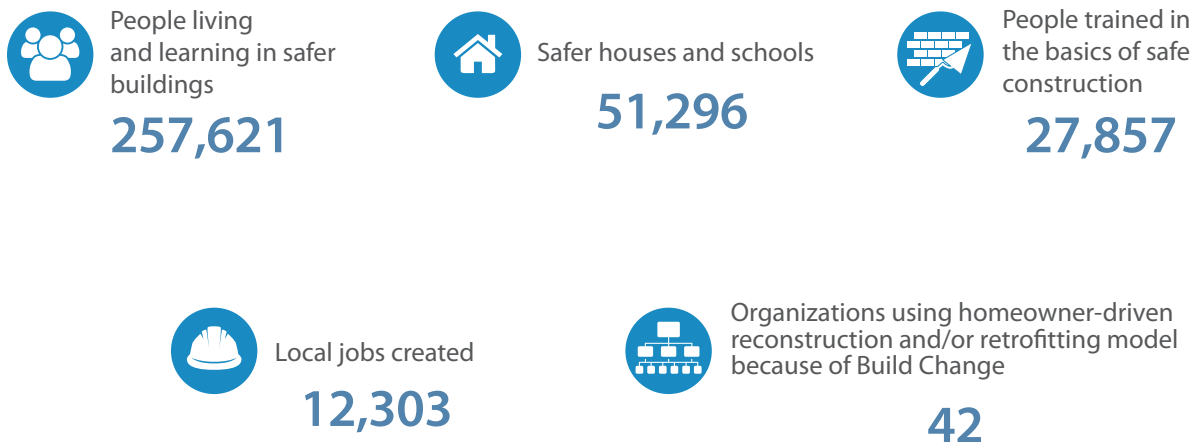


**More Highly Leveraged Donor and NGO Community.** Build Change knows what works and what does not for turning post-disaster environments into sustainable development opportunities. Build Change partners with donors and NGOs to implement sustainable, homeowner-driven permanent reconstruction and retrofitting.






## Places of Performance



## Build Change Impact Since 2004




## Engineering Partnerships

	<p>Degenkolb Engineers San Francisco, CA 2011-2014</p> <p>Build Change and Degenkolb Engineers worked together to develop a Seismic Evaluation and Retrofit Manual for low-rise masonry buildings in Haiti. This manual has been used to retrofit 3,000 buildings and train 5,086 engineers employed by the Haiti Ministry of Public Works (MTPTC).</p> <p>This manual received two awards:</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p><b>Structural Engineers Association OF CALIFORNIA</b></p> </div> <div> <p>2013 Structural Engineers Association of California (SEAOC) Award of Excellence: Study/Research/Guidelines</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p><b>Structural Engineers Association OF NORTHERN CALIFORNIA</b></p> </div> <div> <p>2013 Structural Engineers Association of Northern California (SEAONC) Award of Excellence in Structural Engineering</p> </div> </div>
	<p>Forell/Elseesser Engineers, Inc. San Francisco, CA 2009 - 2011</p> <p>Build Change and Forell/Elseesser Engineers, Inc. collaborated to produce two plans for the construction of earthquake-resistant houses in Haiti, for two- and three-story mixed use buildings and one- and two-story reinforced masonry houses.</p> <p>Build Change and Forell/Elseesser Engineers, Inc. collaborated in China to evaluate engineering designs for two-story confined masonry houses built in the reconstruction following the 2008 Wenchuan earthquake.</p>
<p><b>Guy Nordenson and Associates</b></p>	<p>Guy Nordenson and Associates New York, NY 2010 - 2011</p> <p>Build Change and Guy Nordenson and Associates worked together to produce design and construction guidelines for confined masonry housing in Haiti.</p>
	<p>Savvy Structures, Inc. Cornwall-on-Hudson, NY 2010 - 2011</p> <p>Build Change and Savvy Structures, Inc. produced design and construction guidelines for one- and two-story timber frame structures in Haiti.</p>



## Engineering Partnerships (Continued)

<b>USAID Primers</b>  At the request of the USAID Economic Growth and Trade Office of Infrastructure and Engineering (EGAT/IE), Build Change wrote three primers, one under subcontract to International Resources Group (IRG) and two under subcontract to Parsons Corporation. 	
	International Resources Group (IRG) Washington, D.C. <i>Building Back Housing in Post-Disaster Situations – Basic Engineering Principles for Development Professionals: A Primer – Jan 2012</i>
	Parsons Corporation Denver, CO <i>Seismic Retrofit of Housing in Post-Disaster Situations – Basic Engineering Principles for Development Professionals: A Primer – Jan 2014</i> <i>Site and Retaining Wall Hazard Mitigation in Post-Disaster Situations: A Primer – Jan 2014</i>

<b>Housing Designs for Aceh Post-Tsunami Reconstruction</b> From 2005 to 2007, Build Change worked with several groups of pro-bono engineering consultants to design and review the designs of houses for reconstruction in Indonesia following the 2004 Indian Ocean Tsunami.	
<i>Design team including engineers from Certus, DASSE, Forell/Elsesser Engineers, Inc., and others.</i>	Build Change worked with a design team including engineers from Certus, DASSE, Forell/Elsesser Engineers, Inc., and others. The partnership produced the Build Change Earthquake-Resistant Design and Construction Guideline for Single Story Confined Masonry Houses Built in the Aceh Permanent Housing Reconstruction Program.
<i>Design team including volunteer structural engineering firms.</i>	Build Change worked with volunteer structural engineering firms for house design for Aceh, Indonesia. This house design received an award:  2006 Structural Engineers Association of Northern California (SEAONC) Award of Excellence in Structural Engineering
<i>Design team including engineers Tim Hart, Jason Pisano, and Lisa Cassedy.</i>	Build Change worked with a design team including engineers Tim Hart, Jason Pisano, and Lisa Cassedy to produce Banda Aceh Skirted House Design Options for Indonesia.
<i>Design team including engineers Carl Wilford, Rafael Sabelli, David Kirschenbaum, and Forrest Lanning.</i>	Build Change worked with a design team including engineers Carl Wilford, Rafael Sabelli, David Kirschenbaum, and Forrest Lanning to produce Banda Aceh Stilt House Design Options for Indonesia.

## Past Projects - Indonesia



### Project: Build Capacity in Aceh to Rebuild Safe Houses, Improve Livelihoods, and Increase Resilience

Client: USAID

Location: Aceh, Indonesia

Year: 2013-2015

Impact: 3,083 homeowners received technical assistance. 2,172 families living in safer houses. 100 “mobile extension workers” trained in safe construction. 29,517 people (about half of the population impacted by the 2012 earthquake) provided with information via posters, pamphlets, public meetings, and radio.

Following the July 2013 earthquake near Takengon, Aceh, Indonesia, USAID supported Build Change to implement a technical assistance program to support homeowners and local government with reconstruction of houses damaged by the earthquake. The Indonesian government provides cash subsidies for families who have lost their house in this earthquake.

Build Change developed educational posters, flyers, demonstration models, radio programs, and other outreach materials consistent with USAID branding and marketing rules, and implemented a large scale awareness campaign to increase the number of people rebuilding disaster-resistant timber or confined masonry houses. In addition, Build Change held rural community trainings on the basics of safe construction for homeowners.

Using in-house, previously developed construction manuals and training guidelines, Build Change trained over 100 “mobile extension workers” – members of the community affected by the earthquake and/or students of construction at vocational high schools – to serve as ambassadors for safe construction. Build Change’s team of Indonesian construction supervisors and engineers provided on-the-job training for builders.

To collect data and monitor impacts for this program, Build Change implemented an innovative tablet-based assessment and construction supervision tool.



## Past Projects - Indonesia



### Project: Design Review, Construction Documents

Clients: CARE, Catholic Relief Services, International Organization for Migration (IOM), Mercy Corps

Location: Aceh, Indonesia

Year: 2006-2007

Impact: 4,200 safer houses.

Build Change improved the design and construction of over 4,200 houses built in the post-tsunami housing reconstruction program in Aceh, Indonesia by providing technical assistance to NGOs engaged in housing reconstruction.

Build Change reviewed designs of confined masonry single-story buildings for compliance with reconstruction standards issued by the Indonesian government, and international standards for earthquake-resistant confined masonry buildings.

Build Change provided structural engineering calculation packages and recommendations for improvements to the design and construction of these buildings.

In 2006, Build Change's house design for Aceh won an Award of Excellence in Structural Engineering from the Structural Engineers Association of Northern California (SEAONC) and a Certificate of Merit from the Structural Engineers Association of California (SEAOC).

## Past Projects - Indonesia



### Project: Builders Training, Design Review, and Construction Supervision

Clients: Australia AID through HK Logistics

Location: Aceh, Indonesia

Year: 2007

Impact: 130 builders trained. 15 houses built.

Build Change worked in partnership with the Roving Construction Team (RCT), a team of Indonesian masons, carpenters, and other skilled builders to build 15 houses designed by Build Change. Through the construction process, Build Change trainers increased the skills of these construction professionals.

The work was divided into six stages, with classroom training on each of the components prior to hands-on training during construction. Build Change's Indonesian supervisors were present daily to provide additional oversight and training. Following this project, the RCT continued to build earthquake-resistant houses in Aceh. Some participants increased their incomes and received promotions after receiving these trainings.

Build Change's houses in Aceh were called "best in Aceh" by a team of Indonesian academics and senior engineers.



## Past Projects - Indonesia



### Project: Earthquake-Resistant Design and Construction Vocational Training Program for Students and Teachers

Clients: Caterpillar Foundation, Caterpillar Foundation through Give2Asia, Fondation Philanthropia, Mercy Corps, Thornton Tomasetti

Location: Aceh, Bengkulu, West Java, and West Sumatra, Indonesia

Year: 2009-2013

Impact: 5,731 students trained. 460 teachers trained. 200 school superintendents trained.

As part of a long-term effort to promote earthquake-resistant design and construction (ERDC) in Indonesia, Build Change collaborated with various Educational Bureaus to disseminate ERDC standards in vocational centers across the country. The main priority of this collaboration has been to provide training at the vocational high school level to create a sustainable pipeline of workers skilled in ERDC.

Build Change created the framework for future ERDC curricula by providing hands-on training for 5,731 students and capacity building for 460 teachers and 200 superintendents, as well as distributing technical resources, construction site safety kits, and implementation manuals.

## Past Projects - Indonesia



### Project: Brick Manufacturing Program to Build Capacity of Local Brickmakers

Clients: Caterpillar Foundation, The JTI Foundation, Philip Morris International, Sampoerna

Location: Aceh and Padang, Indonesia

Year: 2014-2016

Houses and schools built with poor-quality bricks are likely to collapse during natural disasters. Better bricks make safer houses and schools. Build Change works in Indonesia to provide training and recommendations to the owners of brickmaking businesses so they can improve their bricks, increase their earnings, and reduce their environmental impact.

Build Change provides on-the-job training for small businesses, particularly those that are women-owned, to improve the quality of their products. Build Change staff also offer business skills training in management, budgeting, and more efficient manufacturing techniques.

Build Change also conducts public outreach to encourage local communities to use these safer building materials.



## Past Projects - China



### Project: Post-Earthquake Technical Reconnaissance Study

Client: Sichuan University, University of California Office of the President

Location: Sichuan, China

Year: 2008

In partnership with Sichuan University, a connection made through the University of California, Office of the President, 10 + 10 strategic partnership with 10 universities in China, Build Change performed a technical reconnaissance study of the area hit by the May 12, 2008, Wenchuan earthquake.

This reconnaissance included a field visit to the affected area and an assessment of single- and two-story housing, multi-story residential and commercial buildings, bridges, and surface expression of fault rupture. Six reconnaissance reports were produced covering these topics.

As part of this study, Build Change also performed a housing subsector study, which included assessment of:

- Common structural systems
- Locally available building materials, sources, quality, and cost
- Skill level of local builders, and commonly used tools
- Architectural and cultural preferences of homeowners
- Climate considerations and other hazards
- Building codes available
- Financing and reconstruction mechanisms

## Past Projects - Haiti



### Project: LAMIKA Physical Renewal Pillar III Housing Technical Assistance Program

Client: American Red Cross through Global Communities

Location: Carrefour Feuilles, Port-au-Prince, Haiti

Year: 2014-2016

Impact: 522 families live in safer houses and 463 students learn in safer schools

In 2014, Build Change and lead partner Global Communities began the 30 month implementation of TORs 1 and 2 of Pillar III of the American Red Cross LAMIKA project.

Build Change provided technical assistance for the homeowner-driven site mitigation, retrofit and/or expansion of an estimated 185 houses, with the end result of 522 families living in safe houses.

The TORs aimed to mitigate site risks and use homeowner-driven construction for the retrofit and/or expansion of houses for 500 families. An estimated 487 builders were trained in Build Change's training center in Campeche, creating a local workforce with permanent skills in disaster-resistant design and construction. Moreover, 2 schools were retrofitted through the technical assistance to school committees, and led to 463 students to learn in safer school buildings.



## Past Projects - Haiti



### Project: Block Manufacturing Program to Build Capacity of Local Blockmakers and Create Jobs

Clients: Anonymous Donors, Hilti Foundation, Save The Children

Location: Haiti

Year: 2011-2017

Impact: In Progress; 259 local concrete block manufacturing businesses with 1990+ staff trained.

Build Change is working in partnership with local small businesses in Haiti to produce better building materials and create jobs. Concrete blocks are the most common building material in Haiti, and their quality can be poor. These poor-quality blocks contributed to the collapse of buildings in the 2011 earthquake.

Build Change provides training for blockmakers on block production and curing and the selection and proportion of aggregates. It also provides compression testing services. Better blocks have contributed to thousands of safer buildings in Port-au-Prince.

Build Change provides training for business owners on cash flow management. In addition, Build Change helps blockmakers with advertising to create demand for higher quality concrete blocks. The increased demand for these better blocks provides an incentive for businesses to continue producing quality blocks, as doing so increases their profits. Businesses are then able to hire additional workers to increase their production rate, creating much-needed jobs.

## Past Projects - Haiti



### Project: House of Knowledge: A Space to Learn the Basics of Earthquake-Resistant Design and Construction

Clients: Cordaid

Location: Tisous, Haiti

Year: 2012

The House of Knowledge is a 61 m<sup>2</sup> two-story structure built to provide the community of Tisous with a space to learn the basic concepts of earthquake-resistant design and construction.

Its purpose is threefold:

The House of Knowledge includes numerous learning resources, including scale models of housing walls and slabs, examples of good-quality building materials, safe construction flyers, and photo exhibits.

The structure itself is earthquake-resistant, reinforcing the idea that building safer houses does not require sacrifices in design, space utility, cost, or aesthetics.

The construction process provided an opportunity to train and qualify builders and tradesmen from Tisous to build earthquake-resistant houses, and to demonstrate this process to community members.

The community has expressed admiration both for the house's construction quality and its design features.

Build Change has been approached by community members for questions and clarifications regarding safe construction. This level of acceptance and involvement from the community provides encouragement that the House of Knowledge will become a focal point and efficient resource center for disaster-resistant design and construction in Haiti.



## Past Projects - Haiti



### Project: School Seismic Evaluations and Strengthening Recommendations

Clients: Salvation Army, Save The Children

Location: Saint Marc, Rossignol, Arcahaie, and Marchand-Dessalines, Haiti

Year: 2014

Impact: 15 schools evaluated, strengthening recommendations provided.

Millions of children worldwide go to class in school buildings that are weak and likely to collapse in earthquakes or windstorms. Ensuring that school buildings can withstand natural disasters is important to protect students during the event, and to ensure that their education is not disrupted in the long term.

When a school does collapse, local education is thrown into chaos. Sometimes classes are held in ad hoc community centers, tents, or damaged schools. Most times however, students do not have access to consistent education again until the building is rebuilt, a process which can take years.

Build Change provided structural evaluations and strengthening recommendations for twelve schools in Saint Marc, Rossignol, Arcahaie, and Marchand-Dessalines, Haiti, including structural evaluations of buildings at each school site and provided a summary of key structural deficiencies for each building.

Build Change engineers provided strengthening recommendations along with associated cost estimates to result in disaster-resistant school buildings.

## Past Projects - Philippines



### Project: Technical Assistance and Training for Family-Driven Reconstruction of 150 Houses

Clients: Cordaid

Location: Sulangan, Philippines

Year: 2014

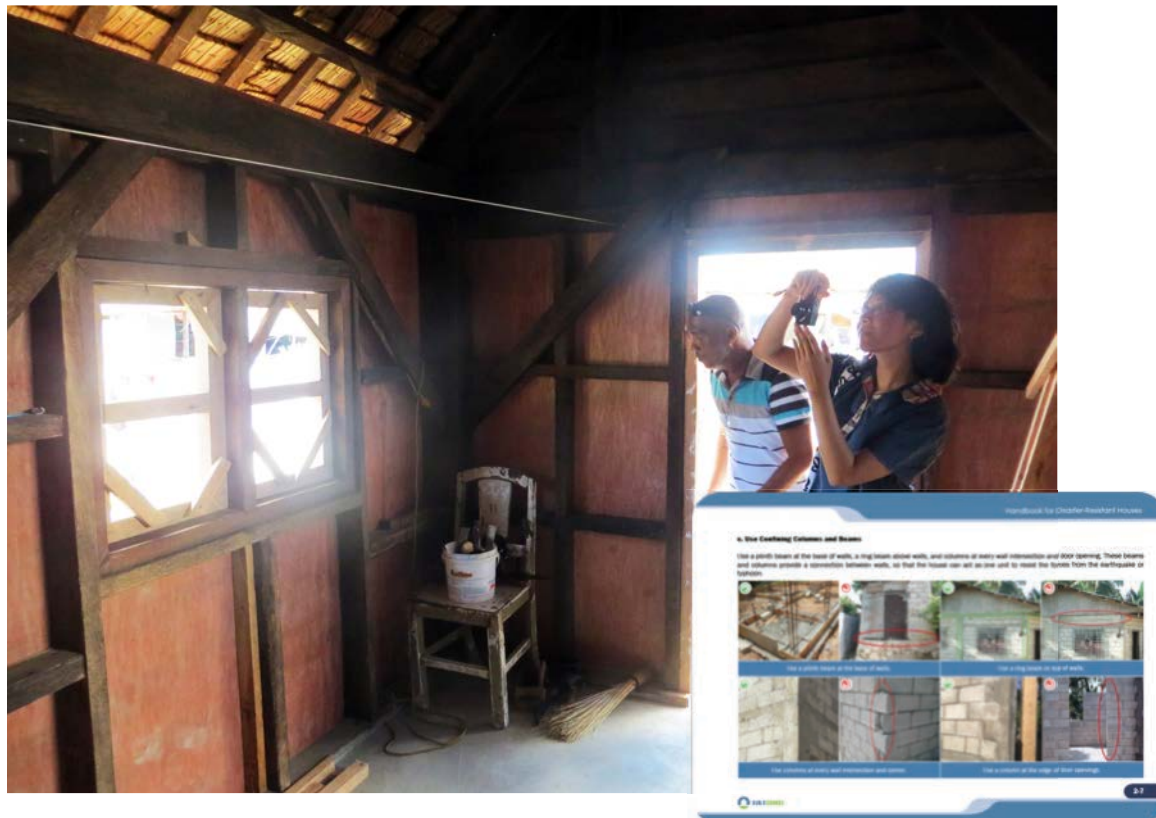
Impact: In Progress.

Build Change began work on a scaled homeowner-driven housing project with Cordaid in December 2014. This homeowner-driven reconstruction approach enables vulnerable families to live in safe houses.

Build Change provided structural design criteria, details, and construction documents for confined masonry houses and is providing technical supervision of the houses during construction to ensure the homes are built correctly. This includes structural observations at key intervals, generally timed with concrete pouring.

Build Change is providing intensive on-the-job training for builders and is building the capacity of up to six local blockmakers by providing on-the-job training on how to improve the quality of their products. It also offers business skills training in management, budgeting, and more efficient manufacturing techniques for concrete block manufacturing businesses.

## Past Projects - Philippines



### Project: Repair/Retrofit Guidelines and Training for Philippines Housing Recovery

Clients: Global Shelter Cluster & International Federation of the Red Cross and Red Crescent Societies through Bohol Shelter Cluster

Location: Philippines

Year: 2014

In the Philippines, Build Change has developed posters that depict good and bad construction practices. These posters were distributed in Bohol to communities impacted by the 2013 earthquake, used by the Philippine Constructor's Association (PCA) as a guide of best practices for members, and used by the Bohol Shelter Cluster to inform staff and other NGOs of available resources.

The International Shelter Cluster has also incorporated some of the poster images into their compilation of best practices. These posters are also published in Let's Build, a local home builders' magazine in Cebu.

Build Change developed Design and Construction Guidelines for Residential Houses based on the National Structural Code of the Philippines (NSCP). The guidelines are image-based; using photographs where possible to depict good and bad construction practice, in addition to how to choose good quality materials and a safe site for house construction.

The guidelines are pending endorsement from the Philippines government.



## Past Projects - Colombia



### Project: Retrofit Train-the-Trainers for Servicio Nacional de Aprendizaje de Colombia (SENA) Staff

Clients: SwissContact

Location: Bogotá, Colombia

Year: 2013

Impact: 58 trained.

Build Change provided two Train-the-Trainers curriculums to Servicio Nacional de Aprendizaje de Colombia (SENA), the Colombian organization which provides professional training and formation to workers, youths, and adults.

The purpose of these trainings is to build SENA's capacity to train engineers and builders on retrofitting, scaling Build Change's impact on retrofitting to a national level.

The programs provided were:

Seismic evaluation and retrofitting training for technical construction professionals.

Retrofitting construction techniques for builders.

These included an introductory session for SENA to introduce them to retrofitting and to finalize the training curriculums based on SENA's experience and the Colombia context.

## Past Projects - International



### Project: Building the Capacity of Government Officials

Clients: 2008 Tech Awards Cash Prize, Alwaleed bin Talal Foundation, Cisco Foundation, Cordaid, Thornton Tomasetti

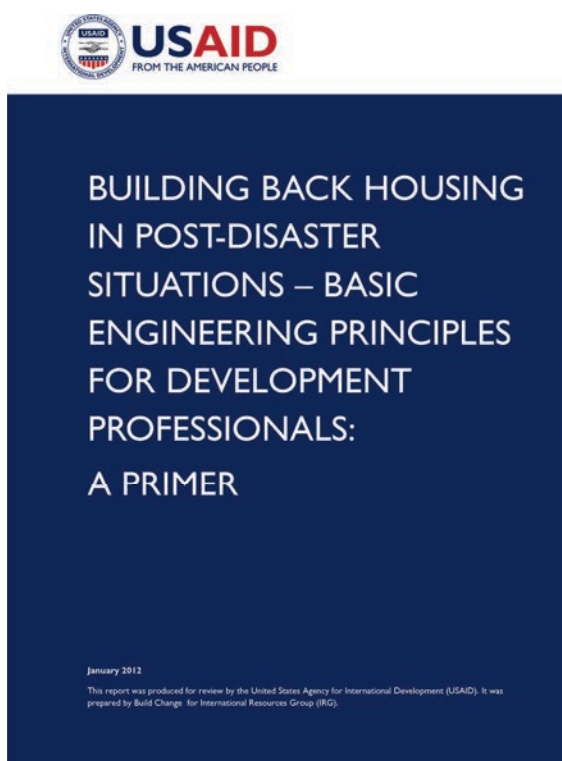
Location: China, Haiti, Indonesia

Year: 2008-2010, 2013

Build Change partners with governments to build their capacity to create and implement simple building guidelines. Build Change also collaborates with governments to train engineers to implement and enforce these standards. This is done by providing technical assistance and training to all levels of government, to facilitate homeowner-driven housing reconstruction and retrofitting programs.

Build Change develops train-the-trainers programs for building disaster-resistant buildings and retrofitting existing structures that can be applied on a national level. By building local capacity, Build Change ensures that retrofitted and newly constructed buildings will be up to code and able to withstand earthquakes and windstorms.

## Past Projects - International



### Project: Primer on Building Back Housing in Post-Disaster Situations

Clients: International Resources Group (IRG) and USAID

Location: International

Year: 2013

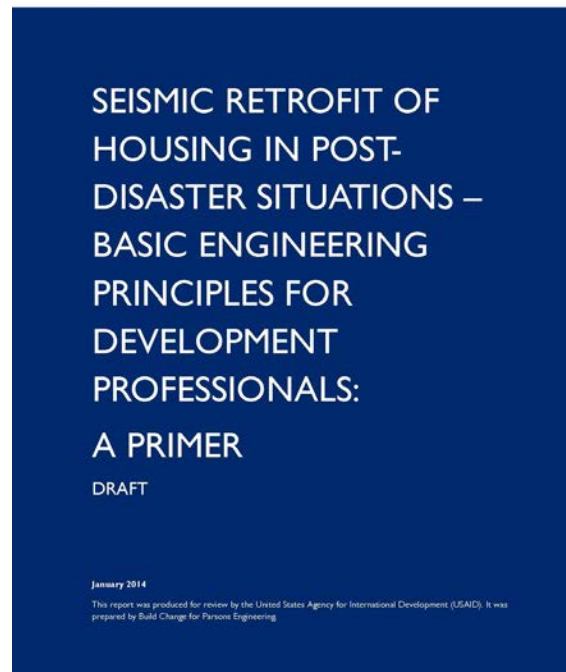
Build Change was contracted by International Resources Group (IRG) on behalf of their client, the USAID Economic Growth and Trade Office of Infrastructure and Engineering (EGAT/IE), to produce a Primer entitled "Building Back Housing in Post-Disaster Situations - Basic Engineering Principles for Development Professionals: A Primer".

The purpose of the Primer is to provide USAID officers, development professionals, and host country officials with the steps, principles, and best practices that need to be taken to carry out a successful housing construction and reconstruction program in a post-disaster situation.

The Primer provides a road map for how to develop a post-disaster housing project through planning, design, and implementation and builds on an earlier report by Build Change, entitled "Basic Engineering and Construction Management: A Primer".



## Past Projects - International



### Project: Primer on Seismic Retrofit of Housing in Post-Disaster Situations – Basic Engineering Principles for Development Professionals

Clients: Parsons Corporation and USAID

Location: International

Year: 2014

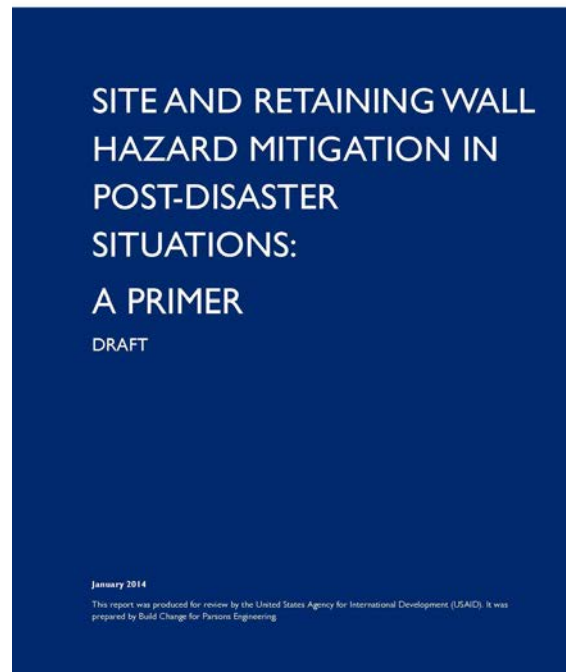
Build Change was contracted by Parsons Corporation on behalf of their client, the USAID Economic Growth and Trade Office of Infrastructure and Engineering (EGAT/IE), to produce a Primer entitled “Seismic Retrofit of Housing in Post-Disaster Situations – Basic Engineering Principles for Development Professionals: A Primer”.

Build Change and Degenkolb Engineers worked together to develop the Seismic Evaluation and Retrofit Manual for low-rise masonry buildings in Haiti. This manual has been used to retrofit 3,000 buildings and train 5,086 engineers employed by the Haiti Ministry of Public Works (MTPTC).

The purpose of the Primer is to provide USAID officers, development professionals, and host country officials with the steps, principles, and best practices that need to be taken to carry out a successful housing retrofit program in a post-disaster situation.

This Primer provides a road map on how to develop a housing retrofit program through planning, design, and implementation and builds on the two earlier reports by Build Change, entitled “Basic Engineering and Construction Management: A Primer”, and “Building Back Housing in Post-Disaster Situations - Basic Engineering Principles for Development Professionals: A Primer”.

## Past Projects - International



### Project: Primer on Site and Retaining Wall Hazard Mitigation in Post-Disaster Situations

Clients: Parsons Corporation and USAID

Location: International

Year: 2014

Build Change was contracted by Parsons Corporation on behalf of their client, the USAID Economic Growth and Trade Office of Infrastructure and Engineering (EGAT/IE), to produce a Primer entitled “Site and Retaining Wall Hazard Mitigation in Post-Disaster Situations: A Primer”.

The purpose of the Primer is to provide USAID officers, development professionals, and host country officials with the steps, principles, and best practices that need to be taken to carry out a successful site hazard mitigation program in a post-disaster situation.

This Primer provides a road map on how to develop a site hazard mitigation program through planning, design, and implementation and builds on two earlier Primers developed by Build Change, entitled “Basic Engineering and Construction Management: A Primer”, and “Building Back Housing in Post-Disaster Situations - Basic Engineering Principles for Development Professionals: A Primer”.

## Past Projects by Year and Client

The following table provides a yearly summary of Build Change's previous experience related to design, construction, quality inspection, and capacity building programs on post-disaster housing reconstruction and pre-disaster retrofitting for risk mitigation.

2017			
Project Name	Description of services/works/properties	Grant/ Contract Amount	Client Information
Enabling Canaan Program (ECP) - Support to Construction Professionals for Safe Construction, Subaward from Global Communities under the American Red Cross, 2017	Reinforce critical components of the construction value chain in the Canaan community, Certify up to 325 builders and 10 block maker (SMEs) for safer building practices and materials.	Subaward \$430,627	Sinan Al Najjar Chief of Party  snajjar@globalcommunities.org
Technical Diagnostic Program for School Infrastructure, Ministry of Education and Vocational Training, Port-au-Prince, Haiti, 2017	Develop a diagnostic tool for the ministry's engineers across Haiti to conduct a TIER 1-type preliminary structural and seismic evaluation and condition assessment for each school in their remit, including an upgrade plan with estimated cost.	\$475,650 Contract	Ministry of Education and Vocational Training (MENFP), Haiti #14, rue Mercier Laham, Delmas 60, Boite Postale 2134 Port-au-Prince, Haiti  Margareth Beauliere Director of Operations argarethbeauliere@yahoo.ca
Expert Advice on Home Retrofitting Alternatives to Mitigate Earthquake Risk in Indonesia, The World Bank, Yogyakarta, Indonesia, 2017	Conducted research in Yogyakarta on informal housing typologies, expected seismic vulnerabilities, and potential retrofitting options to mitigate the deficiencies. Performed field study of 162 homes in 6 neighborhoods in the city. Conducted building evaluation and provided recommendations for retrofit solutions and associated costs.	\$100,000 Contract	The World Bank 1818 H St. NW Washington, DC 20433  Luis Triveno Urban Development Specialist ltriveno@worldbank.org
Expert Advice on Home Retrofitting Alternatives to Mitigate Earthquake Risk, The World Bank, Guatemala, 2017	Reviewed materials and conducted research on housing types, expected vulnerabilities and deficiencies, and potential retrofitting options for informal urban housing.	\$80,000 Contract	The World Bank 1818 H St. NW Washington, DC 20433  Luis Triveno Urban Development Specialist ltriveno@worldbank.org
Technical leadership and training for block production and confined masonry houses, World Vision, Nepal, 2017	Provide technical leadership for conducting on-the-Job training and construction of at least 50 confined masonry houses, including blocks production by community members.	\$19,635 Grant	World Vision Lagankhel, Karmachari Sanchya Kosh Building, 5th Floor Patan 44700, Nepal  Liz Satow National Director, World Vision International Nepal +977 985 1038603 Liz_Satow@wvi.org



## Past Projects (Continued)

Standardized retrofitting type designs for 3 housing typologies housing and technical assistance for rural housing retrofitting, UNOPS, Nepal, 2017	Finalize Government approval for retrofit mud & stone type design, develop and validate dry stone and adobe designs. Replicate rural retrofitting through three vectors: NGOs, Entrepreneurs, and Private Individuals. Conduct retrofit replication in 18 locations, train 100 engineers and local builders.	\$385,705 Grant	UNOPS Nepal Milap Marg Bisalagar, Kathmandu 4  Simon Darke Shelter and Infrastructure Manager UNOPS Nepal +977 981 012 0012 SimonDA@unops.org
Curriculum development for 50-day house retrofitting training, Helvetas, Nepal, 2017	Develop a 50-day on-the-job training curriculum for mud & stone house retrofitting.	\$51,000 Grant	Helvetas Nepal Jhamshikhel, Dhobighat Lalitpur, Kathmandu 00688, Nepal  Bharat K. Pokharel Country Director +977 98510 62002 <a href="mailto:Bharat.pokharel@helvetas.org">Bharat.pokharel@helvetas.org</a>
Campaign to Increase the Use of Disaster-Resistant Construction Practices in Communities Affected by the 2016 Earthquake in Pidie Jaya, Indonesia, 2017	Conduct promotional campaign to increase the adoption of timber-frame with masonry-skirt house and promote disaster-resistant construction practices. Construct 2 model houses and provide on-the-job training for local builders. Provide technical assistance to BPBD, its external consultant, and community leaders.	\$100,000 Grant	International Organization for Migration (IOM) – Indonesia Jl. Prof. DR. Satrio No.45, RT.3/RW.4, Karet Semanggi, Kecamatan Setiabudi, Kota Jakarta Selatan, Daerah Khusus Ibukota Jakarta 12930, Indonesia
Raising Awareness of Earthquake Resistant Construction Practices in Communities in Pidie Jaya, Indonesia, 2017	Provided disaster-resistant construction workshop for 50 homeowners, builders, and local community leaders in Pidie Jaya following the earthquake on December 7 <sup>th</sup> , 2016.	\$1,656 Grant	Oxfam Indonesia Jl. Marga Satwa Raya I, Jl. Gotong Royong I Blok Gotong Royong 2 No.26, RT.5/RW.1, Ragunan Ps. Minggu, Kota Jakarta Selatan, Daerah Khusus Ibukota Jakarta 12540, Indonesia
Training and technical assistance for housing retrofits in Ormoc, Leyte, Swiss Red Cross, Ormoc, Philippines, 2017	Develop tools to assist the Swiss Red Cross to structurally strengthen timber houses and provide training and mentorship to engineers during implementation.	\$37,800 Contract	Swiss Red Cross Rainmattstrasse 10 3001 Bern
Housing retrofitting to increase resilience in Metro Manila's informal Settlements, JTI Foundation, Metro Manila, Philippines, 2017 - 2019	General support for the launch of a pre-disaster housing retrofit project in Metro Manila. Overall project activities include developing training and technical assistance resources that are cost-effective, culturally-appropriate and easy to understand, to assist homeowners in identifying and executing home retrofit and small business expansion solutions that are appropriate for them; facilitating access to financing for retrofitting through loans and subsidies in partnership with organizations, banks and MFIs; and working with the City Government of Makati to establish policies and mechanisms for a retrofit program.	CHF 500,000 Grant	Stiftung JT International (JTI Foundation) 65 Baselstrasse, 6252 Dagmersellen, Luzern Switzerland  Nenad Ljubicic <a href="mailto:nenad.ljubicic@jti.com">nenad.ljubicic@jti.com</a>

## Past Projects (Continued)

2016			
Project Name	Description of services/works/properties	Grant/Contract Amount	Client Information
Reducing Disaster Risk through Safer School and Increased Awareness of Safe Construction Practices, New Zealand Embassy & Thornton Tomasetti Foundation, Padang, Indonesia, 2016 – 2017	Conducted an evaluation of several existing school buildings, and developed a retrofit plan for two classroom buildings. Build Change is currently supervising the strengthening of these buildings and using the retrofit process to conduct general awareness sessions on safe construction practices for students and teachers.	New Zealand Embassy \$17,123 Grant  Thornton Tomasetti Foundation \$10,000 Grant	New Zealand Embassy Jl. Asia Afrika No.8, RT.1/ RW.3, Gelora, Tanah Abang, Kota Jakarta Pusat, Daerah Khusus Ibukota Jakarta 10270, Indonesia  Thornton Tomasetti Foundation 51 Madison Avenue New York, NY 10010
Reducing Seismic Risk in Informal Neighborhoods in Medellín, Lloyd's Charities Trust, Medellín, Colombia 2016 -2019	Adapted technical resources to allow operability and immediate application. Field implementation to begin 2017.	£150,000 Grant	Lloyd's Charities Trust Gallery 5 One Lime Street London, Great Britain EC3M 7HA  Suzanna Nagle Corporate Social Responsibility Manager Suzanna.Nagle@lloyds.com
Community theater production for building back better, World Vision, Sindhupalchok, Nepal, 2016	Worked with local theater troupe to produce and deliver a theater piece on the basics of building safer houses, performed for 32,000 people.	\$29,900 Grant	World Vision Lagankhel, Karmachari Sanchya Kosh Building, 5th Floor Patan 44700, Nepal  Liz Satow National Director, World Vision International Nepal +977 985 1038603 <a href="mailto:Liz_Satow@wvi.org">Liz_Satow@wvi.org</a>
School building evaluation support, Rato Bengala Foundation, Kathmandu Valley, Nepal, 2016	Provided technical assistance in the structural evaluation of a school building in Kathmandu Valley.	\$3,525 Contract	Rato Bengala Foundation Lalitpur, Nepal P.O. Box: 202  Chandini Singh Senior Program Officer <a href="mailto:chandirbf@gmail.com">chandirbf@gmail.com</a>
Structural evaluation of housing projects, SM Cares, Visayas, Philippines 2016 - 2017	Provided expert analysis of seismic safety of a housing project, recommended retrofit solutions and future design improvements.	\$51,030 Contract	SM Cares 10/F Mall of Asia Arena Annex Building Coral Way cor. JW Diokno Blvd Pasay City, 1300 Philippines

## Past Projects (Continued)

Post-Disaster Reconstruction Technical Assistance, Nepal, 2016 - 2018	Provide technical assistance for 3,000 houses across 4 Village Development Committees (VDCs) located in 3 different districts.	\$1,351,454 Grant	American Red Cross Nepal Office Red Cross Marg, Tahachal Height – House D 18 Ward No: 13 Kathmandu, Nepal Tel: +97716924201  Leela Mulukutla Country Representative +977 9810105890 <a href="mailto:leela.mulukutla@redcross.org">leela.mulukutla@redcross.org</a>
Retrofit of one school building, Nepal, 2016	Provided materials for the complete retrofit of 1 school building, consisting of 2 classrooms.	\$46,792 Grant	The CarbonNeutral Company & Eneco Carbon Desk  Mark Meyrick Head of Carbon <a href="mailto:mark.meyrick@eneco.com">mark.meyrick@eneco.com</a>
Linking and learning for Bhutan Ministry of Works and Human Settlement (MOWHS) engineers, MOWHS, Manila, Philippines, 2016	Participatory presentations on the mechanics of confined masonry and parameters for the design and analysis of confined masonry construction. Hands-on training in confined masonry construction techniques, and practical visit to an ongoing confined masonry construction project.	\$13,723 Contract	Bhutan Ministry of Works and Human Settlements (MOWHS) Po Box 791, Opposite to Police Building, Thimphu, Bhutan
Preventative Housing Retrofitting to Increase Resilience in Metro Manila's Informal Settlements, Lloyd's Charities Trust, Metro Manila, Philippines 2016 - 2019	General support for the launch of a pre-disaster housing retrofit project in Metro Manila. Overall project activities include developing training and technical assistance resources that are cost-effective, culturally-appropriate and easy to understand, to assist homeowners in identifying and executing home retrofit and small business expansion solutions that are appropriate for them; facilitating access to financing for retrofitting through loans and subsidies in partnership with organizations, banks and MFIs; and working with the City Government of Makati to establish policies and mechanisms for a retrofit program. Impacts: 310 house retrofits targeted	£150,000 Grant	Lloyd's Charities Trust Gallery 5 One Lime Street London, Great Britain EC3M 7HA  Suzanna Nagle Corporate Social Responsibility Manager <a href="mailto:Suzanna.Nagle@lloyds.com">Suzanna.Nagle@lloyds.com</a>
Expert advice on housing assessments, International Organization for Migration (IOM)- Micronesia, Micronesia, 2016		\$48,797 Contract	International Organization for Migration (IOM) – Micronesia  Suite 2G Pohn Umpomp Building, Pohn Umpomp Place, Nett Municipality, Pohnpei, FSM
Mason training for 100 unskilled masons, World Renew, Nepal, 2016	Supported in the technical training for 100 builders.	\$11,644 Contract	World Renew 1700 28 <sup>th</sup> St SE Grand Rapids, MI 49508  World Renew Nepal Nuwakot Sadak, Bidur 44900, Nepal +977 10-561868



## Past Projects (Continued)

Provide DUDBC-approved mason trainings in 3 districts, Nepal, 2016 - 2017	Trained 300 builders in the basics of safe construction across 3 districts.	\$24,240 Grant	American Red Cross Nepal Office Red Cross Marg, Tahachal Height – House D 18 Ward No: 13 Kathmandu, Nepal Tel: +97716924201  Leela Mulukutla Country Representative +977 9810105890 <a href="mailto:leela.mulukutla@redcross.org">leela.mulukutla@redcross.org</a>
Prototyping & pilot for preventative retrofitting in Metro Manila, IDEO.org, Metro Manila, Philippines, 2016 – 2018	Launched several prototypes to confirm viability of a retrofit project in Metro Manila. General support for Build Change's pre-disaster program in Metro Manila, including developing technical resources, facilitating access to financing for homeowners, and creating demand for retrofitting.	\$110,207 Grant  Additional in-kind support valued at about \$100,000	IDEO.org 100 Forest Ave. Palo Alto, CA 94301  Jocelyn Wyatt Co-Lead and Executive Director <a href="mailto:jocelyn@ideo.org">jocelyn@ideo.org</a>
Development of a Campus Master Plan, MASS Design for Haitian Education & Leadership Program (HELP), Port-au-Prince, Haiti, 2016	Provide technical structural expertise to MASS Design team and contribute to the elaboration of a master plan for the retrofitting, modification, and expansion of a newly acquired university campus comprised of 2071 square meters and 3 pre-existing buildings.	\$4,000 Contract	MASS Design for Haitian Education & Leadership Program (HELP)  Adam Saltzman Project Manager <a href="mailto:adam@mass-group.org">adam@mass-group.org</a>
Better Building Materials – Improving Livelihoods and Reducing Disaster Risk Through Capacity Building of Small and Medium Brickmaking Enterprises, Sumatera Barat, Indonesia, 2016-2019	Provide technical and business assistance to 180 brickmaking small-and-medium sized enterprises and their employees to improve their production quality and livelihoods.  Continue Better Building Materials campaign to significantly increase the demand for good quality bricks, resulting in the improved resilience of local buildings to future natural disasters.	CHF 543,213 Grant	Stiftung JT International (The JTI Foundation) 65 Baselstrasse, 6252 Dagmersellen, Luzern Switzerland  Nenad Ljubicic <a href="mailto:nenad.ljubicic@jti.com">nenad.ljubicic@jti.com</a>
2015			
Project Name	Description of services/works/properties	Grant/Contract Amount	Client Information
Design review of school designs used by Ramon Aboitiz Foundation, Inc (RAFI), Caritas Switzerland, Philippines, 2015 - 2016	Design review of school designs used by RAFI, and developed image-based supervision tools for community members. Trained RAFI staff to in turn train community members, and provided remote support. Revised designs have been used on over 300 classrooms and counting.	\$20,850 Grant	Caritas Switzerland Löwenstrasse 3, CH-6002 Luzern, Switzerland  Jonathan Brigham Shelter Delegate <a href="mailto:jbrigham@caritas.ch">jbrigham@caritas.ch</a>
Mobile extension workers and mobile training units, Global Giving, Nepal, 2015 - 2016	Trained 4,000 community members and 27 local builders in 18 remote villages where 6,000 houses are likely to be rebuilt or repaired.	\$50,000 Grant	Global Giving 1023 15th St. NW, 12th Floor Washington, DC 20005  Britt Lake Chief Program Officer <a href="mailto:blake@globalgiving.org">blake@globalgiving.org</a>

## Past Projects (Continued)

Consulting, training and knowledge transfer for new construction, retrofitting, builder training, awareness and community incentivization, Nepal, 2015 - 2017	Provided capacity building for World Vision to run trainings and awareness in order to support new construction or retrofitting of up to 300 houses per year through homeowner driven techniques.	\$912,690 Grant	World Vision Lagankhel, Karmachari Sanchya Kosh Building, 5th Floor Patan 44700, Nepal  Liz Satow National Director, World Vision International Nepal +977 985 1038603 <a href="mailto:Liz_Satow@wvi.org">Liz_Satow@wvi.org</a>
Increasing Resilience by Retrofitting Homes Through Public-Private Partnerships in Colombia, Swiss Re Foundation, Bogotá, Colombia, 2015	Build Change has performed trainings for technical staff from the city government agency CVP, and from its private operators, which have included Habitat For Humanity, SEVIVIENDA, and others. We have led the team in performing the first 40 evaluations and designs, and the following permitting process, which has included targeted training and streamlining with the five local private permitting agencies. Build Change has also led the team in initiating construction on the homes that have obtained permits, assuring quality control and on the job training for builders and homeowners.	Caja de la Vivienda Popular \$24,669  Swiss Re Foundation \$140,000 Grant  RMS \$174,741 Grant	Caja de la Vivienda Popular de Bogotá  Guillermo Arcila Hoyos Director de Mejoramiento de Vivienda <a href="mailto:garcilah@cajaviviendapopular.gov.co">garcilah@cajaviviendapopular.gov.co</a>
Technical guidelines and training for builders and NGO staff, and community awareness, Mercy Corps, Nepal, 2015 - 2016	Performed a housing subsector study and developed technical guidelines and piloting of model houses. Provided on-the-job training for 48 builders and training for 30 technical staff associated with partner organizations. Awareness building activities for 400 community members.	\$272,624 Contract	Mercy Corps, Nepal Sanepa Chowk, Lalitpur P.O. Box 24374 Kathmandu, Nepal +97715012571 Email: <a href="mailto:np-info@mercycorps.org">np-info@mercycorps.org</a>  Sanjay Karki, Country Director <a href="mailto:skarki@np.mercycorps.org">skarki@np.mercycorps.org</a>
Introductory training session for Barrio Mio program housing technical assistance, Project Concern International (PCI), Guatemala, 2015	Designed and delivered training seminars for a two prong training for local stakeholders to be introduced to retrofitting and the manual. One training module for construction professionals, including municipal technical staff from Mixco and Villanueva; and a training module on retrofit construction techniques for construction workers from the same municipalities.	\$25,113 Grant	Project Concern International (PCI) 5151 Murphy Canyon Rd., Suite 320 San Diego, CA 92123
A Practical Handbook to Safe Housing Expansion, for the LAMIKA Program, Campeche, Carrefour Feuilles, Global Communities for the American Red Cross, Port-au-Prince, Haiti, 2015 - 2016	Development of the contents of an illustrated guide for safe housing expansion in close coordination with two government agencies, which includes guidelines for evaluation of houses and retrofit designs and principles for housing expansion applying the principles of disaster-resistant construction.	\$93,831 Grant	Global Communities for the American Red Cross 8601 Georgia Avenue, #800 Silver Spring, MD 20910 USA  Sinan Al Najjar Chief of Party <a href="mailto:snajjar@globalcommunities.org">snajjar@globalcommunities.org</a>

## Past Projects (Continued)

Simplified Seismic Evaluation and Retrofit Manual for Block Masonry Homes in Guatemala, Guatemalan Association of Seismic Engineers (AGIES), Guatemala, 2015	Build Change developed the manual, based on the similar ones for Haiti and Colombia, and worked with AGIES engineers to make it acceptable to Guatemalan codes and standards. This project is the initial milestone of a larger country strategy aimed at facilitating and incentivizing Guatemalan stakeholders to mitigate existing seismic risk in informal homes, and promote safer densification in urban areas through retrofitting.	\$32,000 Contract	Guatemalan Association of Seismic Engineers (AGIES) 0 calle 15-46 zona 15, Edificio de los Colegios Profesionales, 4to. Nivel, Guatemala  Fernando Szasdi Bardales Executive Coordinator
Set up of the Reconstruction Assistance Center in Martissant, Unité de Construction de Logements et de Bâtiments Publics (UCLBP), Port-au-Prince, Haiti, 2015 - ongoing	Set up of the Center for Reconstruction Assistance within the Program of Integrated Urban Planning in Informal Neighborhoods of Port au Prince (AIQIP).  Technical assistance for homeowner-driven housing retrofitting, reconstruction and densification, maximizing housing subsidies, and support to verify ownership titles, and awareness activities in the community for earthquake resistant construction practices.	\$1,172,870 Grant	Unité de Construction de Logements et de Bâtiments Publics (UCLBP), Pétiön Ville, Haiti  Ing. Odnell David Directeur Division Logements (509) 2816-5595"
REZO - Framework for Professional Development in the Informal Construction Sector in the Northern Region, USAID Local Solutions, Haiti, 2015 - ongoing	Support selected 210 unemployed, vulnerable young adults and 150 informal construction workers through a comprehensive process of competency based training, apprenticeship and certification to enable them to successfully compete in the formal market place. REZO Resource Center and liaison between affiliates and private sector services capable of assisting in business formalization and expansion.	\$499,577 Grant	USAID  Sam Cénor Field Monitor Economic Growth & Agricultural Development (EGAD) scenor@usaid.gov
Design Review in Terre Froide, Haiti School Project (HSP), Haiti, 2015	Revision of design drawings and verification that the proposed structure is seismically resistant. Recommendations of design revision options, at conceptual level.	\$2,917 Contract	Haiti School Project  Tim Myers Co-Founder, Board Member tim@haitischoolproject.org
Existing Buildings' Structural Assessments, Haitian Education & Leadership Program (HELP), Port-au-Prince, Haiti, 2015	Site visits to three buildings, basic seismic evaluations and structural condition assessments of the buildings.	\$5,100 Contract	Haitian Education & Leadership Program  Amber Walsh Deputy Country Director Port-au-Prince, Haiti awalsh@uhelp.net
Vocational Training for 40 Participants, Digicel Foundation, Port-au-Prince, Haiti, 2015	Provide training for 40 professionals in earthquake and hurricane-resistant construction practices.	\$10,000 Contract	Digicel Foundation  Sophia Stransky CEO
Vocational Training for 25 Participants, Centre d'Etude et Coopération Internationale (CECI), Port-au-Prince, Haiti, 2015	Provide training for 25 vocational students in earthquake and hurricane-resistant construction practices, providing the technical skills needed to enter the workforce as boss masons and ultimately improving their livelihoods.	\$38,580 Contract	Centre d'Étude et Coopération Internationale (CECI) Carrefour Feuilles Port-au-Prince, Haiti  Julien Lenève PRODEPUR Habitat Program Manager julienl@ceci.ca Phone: +509 3719-6842



## Past Projects (Continued)

Vocational Training for 50 Participants, Cimenterie Nationale (CINA), Port-au-Prince, Haiti, 2015	Provide training for 50 professionals in earthquake and hurricane-resistant construction practices.	\$12,500 Contract	CINA  José-Fred Lalanne Technical Center Manager Fond Mombin, Cabaret, Haiti jlalanne@cina-haiti.com
Technical Assistance and Training, Give2Asia, Maliwaliw, Philippines, 2015 - 2016	Provide technical assistance and training for community-driven new house construction in Maliwaliw, Philippines.	\$211,294 Grant	Give2Asia 340 Pine Street #501 San Francisco, CA 94104 USA  Alexie Mercado Field Manager afmercado@give2asia.org Phone: +63 0917 891 2233
Brick Manufacturing Program to Build Capacity of Local Brickmakers, JTI Foundation, Padang, Indonesia, 2015 - 2016	Train 45 brickmaking small- and medium-sized enterprises and their employees, covering about 170 beneficiaries in total.  Better Building Materials campaign to reach over 15,000 community members, to raise awareness of the importance of using high-quality bricks to create more resilient buildings.	\$110,359 Grant	Stiftung JT International (JTI Foundation) 65 Baselstrasse, 6252 Dagmersellen, Luzern Switzerland  Nenad Ljubicic nenad.ljubicic@jti.com
Geotechnical Survey, Give2Asia, Maliwaliw, Philippines, 2015	Determine the properties of the soil and evaluate the requirements for the foundations of the houses based on the strength or weakness of the soil in Maliwaliw, Philippines.	\$3,930 Grant	Give2Asia 340 Pine Street #501 San Francisco, CA 94104 USA  Alexie Mercado Field Manager afmercado@give2asia.org Phone: +63 0917 891 2233
2014			
Project Name	Description of services/works/properties	Grant/ Contract Amount	Client Information
Vocational Training for 60 Participants, Centre d'Étude et Coopération Internationale (CECI), Port-au-Prince, Haiti, 2014	Provide training for 60 vocational students in earthquake and hurricane-resistant construction practices, providing the technical skills needed to enter the workforce as boss masons and ultimately improving their livelihoods.	\$59,600 Contract	Centre d'Étude et Coopération Internationale (CECI) Carrefour Feuilles Port-au-Prince, Haiti  Julien Lenève PRODEPUR Habitat Program Manager julienl@ceci.ca Phone: +509 3719-6842
Brick Manufacturing Program to Build Capacity of Local Brickmakers, Caterpillar Foundation, West Sumatra, Indonesia, 2014 - 2015	Train brickmakers of small- and medium-sized businesses, with an emphasis on promoting women-owned businesses, to improve the quality of bricks, improve business skills resulting in improved livelihoods, and reduce overall environmental impacts of brick-making to reduce the threat of natural disasters.	\$111,790 Grant	Caterpillar Foundation 100 N.E. Adams St. Peoria, IL 61629-1480 USA  Glen Harris Phone: 309-675-1028

## Past Projects (Continued)

Technical Assistance and Training for Homeowner-Driven Reconstruction of 50 Houses, Cordaid, Sulangan, Philippines, 2014	Provided technical assistance and training for confined masonry houses in Sulangan, Eastern Samar, Philippines. Trained homeowners and local builders in disaster-resistant construction practices.	\$282,167 Grant	Cordaid Philippines (C.O. Caritas Germany) Office 401 - Krizia Building Gorordo Avenue Lahug Cebu City 6000, Philippines  Ronald Langford Country Program Manager Phone: +63 0 915264620
Engineering Services to Develop Innovative, Durable, and Cost-Effective Permanent Housing Solutions, Cordaid, Sulangan, Philippines, 2014	Develop innovative, durable, and cost-effective permanent housing solutions in Sulangan, Eastern Samar, including soil load-bearing investigations, structural design of masonry housing models, supervision of the construction of three demonstration houses, and review of existing building designs.	\$66,130 Contract	Cordaid Philippines (C.O. Caritas Germany) Office 401 - Krizia Building Gorordo Avenue Lahug Cebu City 6000, Philippines  Ronald Langford Country Program Manager Phone: +63 0 9152646203
Brick Manufacturing Program to Build Capacity of Local Brickmakers, Philip Morris International, Aceh, Indonesia, 2014	Build capacity of local brickmakers to improve the quality of bricks, improve livelihoods, create jobs, and reduce environmental impacts.  Create entrepreneurial opportunities, improve and expands financial and economic security, and improve the well-being and stability of communities in Aceh by building the skills of small- and medium-sized enterprises, particularly women-owned, stimulating local demand, and creating entrepreneurial opportunities and jobs.	\$111,790 Grant	Philip Morris International Contributions Department Ave. de Rhodanie 50 1001 Lausanne, Switzerland  Jennifer P. Goodale Vice President Contributions Phone: +41 58 242 00 00
Engineering Services to Support Cost-Effective Permanent Housing Solutions, Cordaid, Sulangan, Philippines, 2014	Provide engineering services to deliver resilient housing solutions, including development of a retrofit methodology for timber construction, development of modules for the Philippines Design and Construction Guidelines, and testing of coconut lumber.	\$27,420 Contract	Cordaid Philippines (C.O. Caritas Germany) Office 401 - Krizia Building Gorordo Avenue Lahug Cebu City 6000, Philippines  Ronald Langford Country Program Manager Phone: +63 0 9152646203
Post-Earthquake Housing Reconstruction Technical Assistance Program with Seismic Evaluation and Retrofit Training, CARE-Haiti, Port-au-Prince, Haiti, 2014	Provide competency-based training courses in disaster-resistant construction to 256 builders selected by CARE, providing them with the opportunity to develop their knowledge and practical skills in disaster-resistant construction techniques, the possibility of business expansion by means of access to Build Change's network of certified construction professionals (REZO), and the chance to be instrumental in the delivery of high quality, disaster-resistant construction work.	\$79,820 Contract	CARE Haiti 92 Rue Gregoire Pétionville Port-au-Prince, Haiti  Simon Deprez Urban Planner & DRR Advisor
Drafting and Disseminating of a Construction Administration Manual for Haiti with MASS Design Group, Haiti, 2014	Participate in a collaborative effort to create a Quality Assurance/Quality Control (QA/QC) program for Construction Administration (CA) of buildings, with the intent to leverage the experience and capacities of each organization to create a set of documents, procedures, and standards that is practical, implementable, and effective within the Haitian context.	\$20,000 Grant	MASS Design Group, Inc. (funded by The Shelley and Donald Rubin Foundation) 46 Waltham St. #312 Boston, MA 02116 USA  Alan A. Ricks Chief Operating Officer

## Past Projects (Continued)

Support and Boost Housing Construction, Entrepreneurs du Monde for Solidarités International, Christ-Roi, Haiti, 2014	Support and improve the dynamics of reconstruction taking place in the Christ-Roi district of Port-au-Prince, Haiti, according to the principles of homeowner-driven reconstruction to facilitate access to safe housing, improve sustainable construction practices, and stimulate the rehabilitation and construction of housing.	\$268,023 Grant	Entrepreneurs du Monde for Solidarités International 29 Ladmiraault Street, 86000 Poitiers, France  Gilles Lossois Haiti Country Director
LAMIKA Physical Renewal, Campeche, Carrefour Feuilles, Global Communities for the American Red Cross, Port-au-Prince, Haiti, 2014	Provide reconstruction and retrofitting of housing and support infrastructure with household and community participation as part of The American Red Cross LAMIKA project in Port-au-Prince, Haiti.  Technical assistance for homeowner-driven housing retrofitting, construction and densification, maximizing homeowner subsidy values, homeowner-driven retaining wall retrofitting, and builder construction training.	\$2,597,082 Grant	Global Communities for the American Red Cross 8601 Georgia Avenue, #800 Silver Spring, MD 20910 USA  Nubar Goudsouzian Chief of Party ngoudsouzian@ht.globalcommunities.org
LAMIKA Physical Renewal, Campeche, Carrefour Feuilles, Global Communities for the American Red Cross, Port-au-Prince, Haiti, 2014	Technical Assistance for retrofitting of 2 schools in Carrefour Feuille by adapting the homeowner driven approach to a school-committee driven approach as part of The American Red Cross LAMIKA project in Port-au-Prince, Haiti.  Provide reconstruction and retrofitting of housing and support infrastructure with household and community participation.  Technical assistance for homeowner-driven housing retrofitting, WASH facilities improvement and densification, maximizing homeowner subsidy values, homeowner-driven retaining wall retrofitting and construction, and builder construction training.	\$2,499,246 Grant	Global Communities for the American Red Cross 8601 Georgia Avenue, #800 Silver Spring, MD 20910 USA  Sinan Al Najjar Chief of Party snajjar@globalcommunities.org
School Seismic Evaluations and Strengthening Recommendations in Marchand-Dessalines, Save The Children, Port-au-Prince, Haiti, 2014	Conduct structural evaluations of buildings at each of twelve school sites in Marchand-Dessalines, Haiti, provide a summary of key structural deficiencies for each building, and provide strengthening recommendations along with associated cost estimates, to result in earthquake and wind-resistant school buildings.	\$28,900 Contract	Save The Children International - Haiti #18 Rue Emeric Morne Lazarre Pétionville Port-au-Prince, Haiti  Stephen Gwynne-Vaughan Country Director
Structural Design Review, and Design Recommendations for a Confined Masonry House, Food For The Poor, Haiti, 2014	Perform a design review of existing construction documents, a summary of key structural deficiencies identified, and design recommendations for correcting deficiencies, to result in an earthquake- and wind-resistant house.	\$4,075 Contract	Food For The Poor Rue Barbancourt Route De L'Aéroport Port-au-Prince, Haiti  Beth Carroll Director of Programs
School Seismic Evaluations and Strengthening Recommendations in Saint Marc, Rossignol, and Arcahaie, Salvation Army, Haiti, 2014	Provide retrofit evaluation and design services for five schools in Haiti, including seismic evaluations of each building, providing a summary of key seismic deficiencies for each building, and preparing retrofit drawings and recommendations.	\$18,700 Contract	Salvation Army #65 Delmas Étage Valerio Canez En face de Delmas 16 Port-au-Prince, Haiti  Raymond Cedoin School Program Manager



## Past Projects (Continued)

16/6 Housing Reconstruction Morne Hercule Pilot Project Structural Assistance, UNOPS, Port-au-Prince, Haiti, 2014	Provide geotechnical engineering services to the Fort National neighborhood in Port-au-Prince, Haiti, as part of the 16/6 project.	\$9,750 Grant	UNOPS Haiti 5, Impasse Devilmé Rue Daniel Brun Bois Moquette, Pétionville Port-au-Prince, Haiti  Claude André Nadon Project Manager
Seismic Evaluations of Sample Houses, Trocaire, Jacmel, Haiti, 2014	Perform an evaluation of a sample of houses being built in Jacmel, Haiti.	\$2,900 Contract	Trocaire 110 rue Goulard Pétionville Port-au-Prince, Haiti  Gigi Dupuy Country Director
Block Manufacturing Program to Build Capacity of Local Blockmakers, Hilti Foundation, Port-au-Prince, Haiti, 2014	Train 120 blockmakers in earthquake- and non-earthquake-affected areas of Haiti to meet expected construction needs, increasing the number of safer houses, schools, community centers, churches, and other public buildings, and furthering marketing and public awareness activities.	\$1,000,000 Grant	HILTI Foundation Liechtenstein 9494 Schaan Feldkircherstrasse 100 P.B. 333 Liechtenstein  Beate Rupp Project Supervisor +423 234 2621 beate.rupp@hilti.com

2013

Project Name	Description of services/works/properties	Grant/Contract Amount	Client Information
Retrofit Train-the-Trainers for Servicio Nacional de Aprendizaje de Colombia (SENA) Staff, SwissContact, Bogotá, Colombia, 2013	Provide two Train-the-Trainers curriculums to SENA: seismic evaluation and retrofitting training for technical construction professionals and retrofitting construction techniques for builders.  Includes introductory session for SENA to introduce retrofitting and finalize the training curriculums based on SENA's experience and the Colombia context.	\$87,435 Grant	SwissContact for Servicio Nacional de Aprendizaje de Colombia (SENA) Calle 97 #10-28 Oficina 402 Bogotá, Colombia  Philippe Schneuwly Country Representative
Repair/Retrofit Guidelines and Training for Philippines Housing Recovery, Bohol Shelter Cluster, Philippines, 2013	Lead a technical working group for local and international agencies and government agencies on the development of simple posters and guidelines on the repair and retrofit of houses affected by the 2013 earthquake in Bohol, Philippines.	\$9,860 Grant	Bohol Shelter Cluster Phone: +63 09183438466 Global Shelter Cluster  Birgit Vaes Shelter Cluster Coordinator Bohol
Pre-Disaster Mitigation Programs in Seismically-Active Emerging Nations, RMS, Latin America, 2013	5-year grant to provide disaster risk reduction services across Latin America to: Mitigate the risk for future disasters Build greater capacity and resilience of local communities Stimulate job creation and economic growth Improve the safety of children, families, and communities Improve building materials quality and productivity Influence nationwide safe building standards and regulation Drive permanent, life-saving change in construction practice in emerging nations	\$500,000 Grant	Risk Management Solutions, Inc. (RMS) 7575 Gateway Blvd. Newark, CA 94560 USA  Hemant Shah President and CEO

## Past Projects (Continued)

Train 45 Vocational Students in Bandung and 25 Builders and Government Officials on the Mentawai Islands on Earthquake-Resistant Design and Construction Techniques, Thornton Tomasetti, West Java and Mentawai Islands, Indonesia, 2013	Provide training on earthquake-resistant design and construction (ERDC) techniques to 45 vocational students and 25 builders and government officials.	\$10,000 Grant	Thornton Tomasetti 51 Madison Avenue New York, NY 10010 USA  Elisabeth Malsch, Ph.D., P.E. Senior Associate
On-the-Job Builder Training for 34 Female Haiti Tec Students, J/P HRO, Port-au-Prince, Haiti, 2013	Provide a builder training workshop in earthquake-resistant construction practices followed by on-the-job training apprenticeships on retrofit construction sites for 34 female students identified by Haiti Tec.	\$7,900 Contract	J/P Haitian Relief Organization (J/P HRO) Delmas 48 Port-au-Prince, Haiti  Richard Dupéré Engineering & Construction Senior Program Manager
Engineers' Training on Retaining Wall Evaluation, Design and Implementation, J/P HRO, Port-au-Prince, Haiti, 2013	Provide training to 10 J/P HRO engineers in soil evaluation, site selection, retaining wall evaluation, design, and implementation.	\$6,630 Contract	J/P Haitian Relief Organization (J/P HRO) Delmas 48 Port-au-Prince, Haiti  Richard Dupéré Engineering & Construction Senior Program Manager
STEM Grant to Expand Retrofit Expertise to Other Country Programs, CH2M Hill Foundation, Haiti and Indonesia, 2013	Adaptation of Build Change Haiti's retrofit program to Indonesia.  Train Build Change Indonesia's local engineers in seismic retrofitting, the development of a post-disaster retrofit training program, and capacity building of local engineers in Haiti and Indonesia to perform retrofit evaluations and create appropriate retrofit designs.	\$25,000 Grant	CH2M Hill Foundation 9191 South Jamaica Street Englewood, CO 80112 USA  Ellen Sandberg Executive Director
Technical Reconnaissance Trip to Guatemala, Mercy Corps, Guatemala, 2013	Provide consultancy to help develop a builder training course identified as an essential prerequisite for safe reconstruction.	\$4,975 Contract	Mercy Corps Guatemala 13 Calle 2-60, Zona 10 Edificio Topacio Azul Of. 12-01 Guatemala Guatemala  Peter Loach Country Director
Earthquake-Resistant Design and Construction Training of Bhutanese Engineers, Bhutan Government, West Sumatra, Indonesia, 2013	Provide training to four Bhutanese engineers on earthquake-resistant design and construction (ERDC) practice at Build Change location in West Sumatra, Indonesia.	\$5,375 Contract	Thimpu Bhutan Bhutan Ministry of Works and Human Settlements Department of Engineering Services  Dago Zangmo Executive Engineer Engineering Adaptation and Risk Reduction Division

## Past Projects (Continued)

Build Capacity in Aceh to Rebuild Safe Houses, Improve Livelihoods, and Increase Resilience, USAID, Aceh, Indonesia, 2013	<p>Provide public outreach and awareness activities.</p> <p>Build local capacity through train-the-trainer programs for 100 mobile extension workers.</p> <p>Provide on-the-job technical assistance and training for homeowners and builders.</p>	\$389,024 Grant	<p>USAID DCHA/OFDA 1300 Pennsylvania Ave., NW Room 8.06 Washington, DC 20523 USA</p> <p>George Siasoco Agreement Officer's Rep. gsiasoco@usaid.gov</p>
Design and Supervision of 50 Earthquake-Resistant Houses and Training of Builders and Homeowners in Delmas 9, French Red Cross, Port-au-Prince, Haiti, 2013	<p>Provide technical assistance and training to homeowners, builders, and neighborhood committees to facilitate the implementation of a housing retrofitting program, within the context of a neighborhood improvement project implemented by the French Red Cross in Delmas 9.</p> <p>Build local capacity to build safe buildings in the future by training homeowners and builders.</p>	\$61,807 Contract	<p>French Red Cross 22 rue Lazarre, Peguy-ville Port-au-Prince, Haiti</p> <p>Emilie Forestier Habitat Delegate Phone: +509 3702-4804</p>
Vocational Training for 75 Participants, Centre d'Étude et Coopération Internationale (CECI), Port-au-Prince, Haiti, 2013	Provide training for 75 vocational students in earthquake- and hurricane-resistant construction practices, providing technical skills needed to enter the workforce as boss masons and improve livelihoods.	\$63,186 Contract	<p>Centre d'Étude et Coopération Internationale (CECI) Carrefour Feuilles Port-au-Prince, Haiti</p> <p>Julien Lenève PRODEPUR Habitat Program Manager julienl@ceci.ca</p>
Primers on Seismic Retrofit of Housing and Site Hazard Mitigation in Post-Disaster Situations, Parsons and USAID, International, 2013	<p>Update of "Housing Reconstruction Primer" developed in 2012 for USAID.</p> <p>Development of two new primers for USAID:</p> <p>"Seismic Retrofit of Housing in Post-Disaster Situations – Basic Engineering Principles for Development Professionals: A Primer"</p> <p>"Site and Retaining Wall Hazard Mitigation in Post-Disaster Situations: A Primer"</p>	\$49,590 Contract	<p>Parsons Government Services 100 West Walnut Street Pasadena, CA 91124 USA</p> <p>Benny Crowder Sr. Subcontract Administrator Phone: 210-253-2621</p>
Technical Assistance as Part of a Proposed Pilot Project for a Housing Finance Package, Sogesol, Port-au-Prince, Haiti, 2013	Provide technical assistance and training over a two-year period to homeowners accessing housing microfinance loans to upgrade their houses.	\$257,280 Contract	<p>Sogesol Bois Verna Port-au-Prince, Haiti</p> <p>Evans Baptiste Director of Commercial Development evbaptiste@sogebank.com</p>
Training and Field Support Services for Post-Earthquake Housing Reconstruction, Caritas Jacmel for CAFOD, Jacmel, Haiti, 2013	<p>Provide technical assistance and training to homeowners and builders to facilitate the implementation of a new housing program in Jacmel, Haiti.</p> <p>Build local capacity to build safe buildings in the future by training homeowners and builders.</p>	\$96,597 Contract	<p>Caritas Jacmel for CAFOD Romero House 55 Westminster Bridge Road London, SE1 7JB UK</p> <p>Sarah Marsh Program Officer-Haiti smarsh@cafod.org.uk</p>



## Past Projects (Continued)

Primer on Building Back Housing in Post-Disaster Situations, IRG and USAID, International, 2013	Preparation of USAID Primer entitled: "Building Back Housing in Post-Disaster Situations - Basic Engineering Principles for Development Professionals: A Primer".	\$15,785 Contract	International Resources Group (IRG) for USAID 1211 Connecticut Avenue, NW Washington, DC 20036 USA  Patricia Klein Project Manager pklein@irgltd.com
Block Manufacturing Program to Build Capacity of Local Blockmakers, Save The Children, Port-au-Prince, Haiti, 2013	Training and capacity building for 45 concrete block making small- and medium-sized enterprises. Training, analysis of manufacturing process, technical assistance with manufacturing techniques, quality of input materials, and testing of end-product quality.  Recommendations about a certification mechanism in collaboration with the Haitian Ministry of Public Works (MTPTC).	\$313,115 Contract	Save The Children 54 Wilton Rd. Westport, CT 06880 USA  Maite Alvarez Food Security and Livelihood Manager malvarez@savechildren.org
Expansion of Technical Assistance for Homeowner-Driven Housing Retrofitting and Overall Capacity Building of Homeowners and Builders in Delmas 32, J/P HRO, Port-au-Prince, Haiti, 2013	Provide technical assistance and training to homeowners, builders, and neighborhood committees to facilitate the implementation of a homeowner-driven housing retrofitting program within the context of a neighborhood improvement project implemented by J/P HRO in Delmas 32.  Build local capacity to build safe buildings in the future by training homeowners and builders.	\$397,621 Grant	J/P Haitian Relief Organization (J/P HRO) Delmas 48 Port-au-Prince, Haiti  Richard Dupéré Engineering and Construction Senior Program Manager Phone: +509 4429-5490
2012			
Project Name	Description of services/works/properties	Grant/Contract Amount	Client Information
Expansion of Earthquake-Resistant Design and Construction Vocational Training Program for Students and Teachers, Fondation Philanthropia, West Sumatra, Bengkulu, and West Java, Indonesia, 2012	Scaling up of vocational training program to train vocational teachers, students, and education supervisors on earthquake-resistant design and construction (ERDC).	\$71,247 Grant	Fondation Philanthropia 100 N.E. Adams St. Peoria, IL 61629-1480 USA Phone: 309-675-1028  Martina Castro Project Manager martina.castro@fondationphilanthropia.org
Expansion of Earthquake-Resistant Design and Construction Vocational Training Program for Students and Teachers in West Sumatra to Bengkulu and West Java, Caterpillar Foundation, West Sumatra, Bengkulu, and West Java, Indonesia, 2012	Continue training program for trade school students, teachers, and supervisors on earthquake-resistant design and construction (ERDC) in West Sumatra province, and expansion of program to Bengkulu and West Java provinces to train an additional 3,000 students, 400 teachers, and 200 supervisors.	\$653,226 Grant	Caterpillar Foundation 100 N.E. Adams St. Peoria, IL 61629-1480 USA Phone: 309-675-1028  Ben Lambert President Lambert_Ben@cat.com

## Past Projects (Continued)

Design and Supervision of 30 Earthquake-Resistant Houses and Training of Builders and Homeowners in Delmas 9, French Red Cross, Port-au-Prince, Haiti, 2012	Provide technical assistance and training to homeowners, builders, and neighborhood committees to facilitate the implementation of a housing retrofitting program, within the context of a neighborhood improvement project implemented by the French Red Cross in Delmas 9.  Build local capacity to build safe buildings in the future by training homeowners and builders.	\$125,769 Grant	French Red Cross 22 rue Lazarre, Peguy-ville Port-au-Prince, Haiti  Emilie Forestier Habitat Delegate deleg3.shelter.haiti.frc@gmail.com
Training and Field Support Services, the Caritas Project in Duval, CAFOD, Duval, Haiti, 2012	Provide technical assistance and training to homeowners and builders to facilitate the implementation of a new housing program in Duval.  Build local capacity to build safe buildings in the future by training homeowners and builders.	\$86,141 Contract	CAFOD Romero House 55 Westminster Bridge Road London, SE1 7JB UK  Sarah Marsh Program Officer-Haiti smarsh@cafod.org.uk
Training of Engineers, Technicians, and Field Personnel and Seismic Evaluation of Retrofits, CARE, Carrefour, Haiti, 2012	Provide Train-the-Trainers to CARE in seismic evaluation, design, and quality control so CARE can successfully implement a housing retrofitting program.	\$94,549 Contract	CARE 92 rue Grégoire Pétionville Port-au-Prince, Haiti  Rodrigo Melo Neighborhood Upgrading Program Manager rodrigo@pap.care.org
2011			
Project Name	Description of services/works/properties	Grant/ Contract Amount	Client Information
Technical Assistance for Homeowner-Driven Housing Retrofitting and Overall Capacity Building of Homeowners and Builders in Delmas 32, J/P HRO, Port-au-Prince, Haiti, 2011	Provide technical assistance and training to homeowners, builders, and neighborhood committees to facilitate the implementation of a homeowner-driven housing retrofitting program, within the context of a neighborhood improvement project implemented by J/P HRO in Delmas 32.  Build local capacity to build safe buildings in the future by training homeowners and builders.	\$192,395 Grant	J/P Haitian Relief Organization (J/P HRO) Delmas 48 Port-au-Prince, Haiti  Richard Dupéré Engineering and Construction Senior Program Manager Phone: +509 4429-5490
Technical Assistance for Homeowner-Driven Housing Reconstruction and Retrofit, Capacity Building and Awareness, Cordaid, Port-au-Prince and Carrefour, Haiti, 2011	Provide technical assistance and training to homeowners, builders, neighborhood committees, and local governments to facilitate the implementation of a homeowner-driven housing reconstruction and retrofitting program, within the context of an integrated neighborhood improvement project coordinated by Cordaid, with the participation of other partner agencies.  Build local capacity to build safe buildings in the future by training homeowners and builders.  Build House of Knowledge in Tisous to provide a place to learn the basics of earthquake-resistant design and construction.	\$2,343,336 Grant	Cordaid Haiti 13 Impasse Théocratie Vivy Mitchel, Route Frères Pétionville, Port-au-Prince, Haiti  Piet Spaarman Head of Mission

## Past Projects (Continued)

Conduct Training in Seismic Design and Construction Practices for New Construction and Seismic Retrofit Projects, the Haiti Ministry of Public Works (MTPTC) and UNOPS, Port-au-Prince, Haiti, 2011	Training of 58 engineers from the Haitian Ministry of Public Works (MTPTC) on seismic design and construction practices for new construction and seismic retrofit projects.	\$44,500 Contract	UNOPS Haiti 5, Impasse Devilmé Rue Daniel Brun Bois Moquette, Pétionville Port-au-Prince, Haiti  Claude André Nadon Project Manager  Cecilia Braedt ceciliab@unops.org
Technical Assistance and Capacity Building for Homeowner-Driven Housing Reconstruction and Retrofit Pilot Project in Haiti, Hilti Foundation and Liechtenstein Red Cross, Port-au-Prince, Gressier, Carrefour, and Duval, Haiti, 2011	Provide technical assistance in safe house design and configuration, earthquake-resistant reconstruction, and selection of adequate materials to homeowners building their houses using their own means in Port-au-Prince, Gressier, Carrefour and Duval.	\$856,660 Grant	HILTI / Croix-Rouge Liechtenstein 9494 Schaan Feldkircherstrasse 100 P.B. 333 Liechtenstein  Fabiola Kalberlah Fabiola.kalberlah@hilti.com
Block Manufacturing Program to Build Capacity of Local Blockmakers, Save The Children, Port-au-Prince, Haiti, 2011	Training and capacity building during a period of three months of 10 concrete blockmaking small- and medium-sized enterprises.  Training, analysis of manufacturing process, technical assistance with manufacturing techniques, quality of input materials, and testing of end-product quality.  Recommendations about a certification mechanism in collaboration with the Haitian Ministry of Public Works (MTPTC).	\$56,925 Contract	Save The Children 54 Wilton Rd. Westport, CT 06880 USA  Maite Alvarez Food Security and Livelihood Manager malvarez@savechildren.org
Earthquake-Resistant Design and Construction Training of 215 Masons and Builders in Haiti, Cordaid, Lomprie, Grand Goave, 7eme, Tisous, Nan Coctou, and Port-au-Prince, Haiti, 2011	Seven 3-day trainings in earthquake-resistant design and construction (ERDC), for a total of 215 masons and builders in the following locations: Lomprie, Grand Goave, 7eme, Carrefour (Tisous), Carrefour (Nan Coctou) and Port-au-Prince.	\$29,060 Contract	Cordaid Haiti 13 Impasse Théocratie Vivy Mitchel, Route Frères Pétionville Port-au-Prince, Haiti  Piet Spaarman Head of Mission
Earthquake-Resistant Design and Construction Training of 90 Masons and Builders in Haiti, Mercy Corps, St. Marc, Mirebalais, and Hinche, Haiti, 2011	Three 3-day trainings in earthquake-resistant design and construction (ERDC), for a total of 90 masons and builders in the following locations: St. Marc, Mirebalais, Hinche.	\$14,700 Contract	Mercy Corps 45 SW Ankeny St. Portland, OR 97204 USA  Kaja Wislinska Phone: +509 3934-2461
Earthquake-Resistant Design and Construction Training of 120 Masons and Builders in Haiti, Architecture for Humanity, Campeche, Jacmel, Montrouis, Pelé, Haiti, 2011	Four 3-day trainings in earthquake-resistant design and construction (ERDC), for a total of 120 masons and builders in the following locations: Campeche, Jacmel, Montrouis, Pelé.	\$12,550 Contract	Architecture for Humanity 848 Folsom St., #201 San Francisco, CA 94107 USA  Darren Gill darrengill@ architectureforhumanity.org



## Past Projects (Continued)

Ongoing Technical Assistance and Capacity Building, Anonymous Donors, West Sumatra, Indonesia, 2011	Hands-on technical assistance to homeowners for reconstruction of new houses; on-the-job training for builders.	\$400,000 Grants	Anonymous donors
Expansion of Earthquake-Resistant Design and Construction Vocational Training Program for Students and Teachers, Caterpillar Foundation, West Sumatra, Indonesia, 2011	Training program for trade school students and teachers on earthquake-resistant design and construction (ERDC).	\$233,785 Grant	Caterpillar Foundation 100 N.E. Adams St. Peoria, IL 61629-1480 USA Phone: 309-675-1028  Ben Lambert President Lambert_Ben@cat.com
2010			
Project Name	Description of services/works/properties	Grant/Contract Amount	Client Information
Emergency Community Assistance and Planning (ECAP) for Shelter and Settlement in Post-Earthquake Haiti, USAID through Habitat for Humanity, Port-au-Prince, Haiti, 2010	Training programs for homeowners and builders on earthquake- and hurricane-resistant new housing; communications materials for safe construction; design resources for new construction and retrofitting.	\$877,000 Grant	USAID OFDA through Habitat for Humanity, ECAP Program  Charles Setchell Shelter, Settlements and Mitigation Advisor USAID OFDA Ronald Reagan Building Washington, D.C. 20523-1000 USA csetchell@ofda.gov  Liz Blake Advocacy, Government Affairs and General Counsel Habitat for Humanity eblake@habitat.org
Expanding Earthquake-Resistant Housing Construction Training, Cisco Foundation, China, 2010	Training programs for government officials, trade school students, and teachers on earthquake-resistant housing.	\$150,000 Grant	Cisco Foundation 170 West Tasman Drive San Jose, CA 95134-1706 USA  Peter Tavernise Executive Director peterst@cisco.com
Ongoing Technical Assistance and Capacity Building, Anonymous Donors, West Sumatra, Indonesia, 2010	Hands-on technical assistance to homeowners for reconstruction of new houses; on-the-job training for builders.	\$115,000 Grant	Anonymous donors
Earthquake-Resistant Design and Construction Builder Training Courses, CHF International and Oxfam International, West Sumatra, Indonesia, 2010	Builder training programs on earthquake-resistant design and construction (ERDC), impacting over 300 builders.	\$70,000 Contracts	CHF International (now Global Communities) 8601 Georgia Ave., #800 Silver Spring, MD 20910 USA  Oxfam International Jln. KIS Mangusarkoro VII No. 5 Padang, West Sumatra, Indonesia

## Past Projects (Continued)

2009			
Project Name	Description of services/works/properties	Grant/ Contract Amount	Client Information
Earthquake-Resistant Design and Construction Vocational Training Program for Students and Teachers, Caterpillar Foundation through Give2Asia, West Sumatra, Indonesia, 2009	Training program for trade school students and their teachers on earthquake-resistant design and construction (ERDC).	\$100,000 Grant	Caterpillar Foundation through Give2Asia 465 California St., #806 San Francisco, CA 94104 USA Phone: 415-743-3336
Transitional Shelter and NFI Relief for Populations Affected by the West Sumatra Earthquake, USAID through Mercy Corps, West Sumatra, Indonesia, 2009	Train-the-trainers program for NGO staff and training and technical assistance programs for homeowners, impacting over 11,000 houses.	\$100,000 Grant	USAID OFDA through Mercy Corps, Emergency Capacity Building Consortium  Paul Jeffrey Senior Program Manager Mercy Corps pjjeffrey@mercy Corps.org  Charles Setchell Shelter, Settlements and Mitigation Advisor USAID OFDA Ronald Reagan Building Washington, D.C. 20523-1000 USA csetchell@ofda.gov
Earthquake Recovery and Rural Housing Rehabilitation, USAID through The Asia Foundation, Sichuan, China, 2009	Construction manual development and training programs for homeowners.	\$82,000 Contract	USAID OFDA through the Asia Foundation  Charles Setchell Shelter, Settlements and Mitigation Advisor USAID OFDA Ronald Reagan Building Washington, D.C. 20523-1000 USA csetchell@ofda.gov
Capacity Building in Sichuan, 2008 Tech Awards Cash Prize, Sichuan, China, 2009	Train-the-trainers, capacity building, mechanisms for quality control for township government, and simple methods to test materials quality.	\$50,000 Grant	2008 Tech Awards for Technology Benefiting Humanity, Equality Category Cash Prize
Technical Assistance and Capacity Building, Timken Foundation, Sichuan, China, 2009	Hands-on technical assistance to homeowners for reconstruction of new houses and on-the-job training for builders.	\$50,000 Grant	Timken Foundation of Canton 200 Market Ave North, #210 Canton, OH 44702 USA

## Past Projects (Continued)

2008			
Project Name	Description of services/works/properties	Grant/ Contract Amount	Client Information
Develop Drawings, BOQs, Inspection Checklists and Training Modules, Mercy Corps and Echoing Green, Sichuan, China, 2008	Design drawings, bills of quantity, construction inspection checklists, and training modules for earthquake-resistant houses.	\$60,000 Grant	Mercy Corps 45 SW Ankeny St. Portland, OR 97204 USA  Echoing Green 494 Eighth Ave, 2nd Floor New York, NY 10001 USA
Post-Earthquake Technical Reconnaissance Study, University of California and Sichuan University, Sichuan, China, 2008	Post-earthquake technical reconnaissance study.	In-kind support	University of California Office of the President  10+10 Strategic Partnership with Sichuan University
Technical Assistance and Capacity Building, Alwaleed bin Talal Foundation, West Sumatra, Indonesia, 2008	Train-the-trainers program for government officials and hands-on technical assistance for homeowners.	\$200,000 Grant	Alwaleed bin Talal Foundation Saudi Arabia
Development of Simple Methods for Testing Materials and Construction Quality, Andalas University, West Sumatra, Indonesia, 2008	Development of simple methods for testing materials and construction quality.	In-kind support	Partnership with Andalas University, Padang, Indonesia
2007			
Project Name	Description of services/works/properties	Grant/ Contract Amount	Client Information
Design Review and Construction Supervision, International Organization for Migration (IOM), Banda Aceh, Indonesia, 2007	Design review and construction inspection impacting 1,700 houses.	\$10,000 Contract	International Organization for Migration (IOM) Jl. Sudirman No. 32 Banda Aceh, NAD Indonesia
Design Review, Construction Supervision, and Training of Trainers, CARE International Indonesia, Banda Aceh, Indonesia, 2007	Design review, construction inspection, and train-the-trainers program impacting 1,700 houses.	\$2,000 Contract	CARE International Indonesia Jl. Soekarno Hatta, Lr. Hagi Binti No. 18 Simpang Dodik, Lamteumen Banda Aceh, NAD Indonesia
Builder Training, Design Review, and Construction Supervision, Australia AID through HK Logistics, Banda Aceh, Indonesia, 2007	Four month apprenticeship training program for 130 builders. Design and construction of 15 houses.	\$20,000 Contract	HK Logistics (subcontractor to Australia Agency for International Development) 37 Mangrove La Taren Point NSW 2229 Australia

## Past Projects (Continued)

Develop Drawings, BOQs, Inspection Checklists and Construction Inspection Services, Catholic Relief Services, Banda Aceh, Indonesia, 2007	Design review, bills of quantity, construction inspection checklists, and construction inspection services, impacting 675 houses.	\$80,000 Contract	Catholic Relief Services Jl. Wedana Masjid Al-Qurban  Ds. Lam Ara Mibo Banda Aceh, NAD Indonesia
2002-2006			
Project Name	Description of services/works/properties	Grant/ Contract Amount	Client Information
Develop Drawings, BOQs, Inspection Checklists and Training Modules, Mercy Corps, Banda Aceh, Indonesia, 2006	Design drawings, bills of quantity, construction inspection checklists, and training modules for earthquake-resistant housing reconstruction.	\$100,000 Grant	Mercy Corps 45 SW Ankeny St. Portland, OR 97204 USA
Develop Designs and Supervise Construction and Materials Procurement, Mercy Corps, Banda Aceh, Indonesia, 2005	Design, materials procurement, and construction supervision of 11 houses.	\$37,000 Grant	Mercy Corps 45 SW Ankeny St. Portland, OR 97204 USA
Technical Reconnaissance and Lessons Learned for Post-Earthquake Housing Reconstruction in Iran, EERI, Bam, Iran, 2004	Technical reconnaissance and lessons learned for post-earthquake housing reconstruction.	In-kind support	Earthquake Engineering Research Institute, Learning from Earthquakes Program  Marjorie Greene Special Projects Manager 499 14th Street #320 Oakland, CA 94612-1934 USA
Lessons Learned from Post-Earthquake Housing Reconstruction in India and Development of Construction Manual for Earth-Based Earthquake-Resistant Houses, EERI, Gujarat, Uttaranchal, and Maharashtra, India, 2002	Lessons learned from post-earthquake housing reconstruction in Gujarat, Maharashtra, and Uttaranchal; construction manual for earth-based earthquake-resistant houses.	\$5,000 Grant	Fulbright Fellowship,  Earthquake Engineering Research Institute Learning from Earthquakes Grant



## Key Personnel



### Elizabeth Hausler, Ph.D. Founder & CEO

Elizabeth Hausler is the Founder and CEO of Build Change, providing strategic leadership and management to the organization. Elizabeth is responsible for developing in-country teams to design, and to train homeowners, builders, engineers, architects, and agencies to build earthquake-resistant houses.

She manages and expands Build Change's board of directors, while supporting fund development efforts and corporate and industry partnerships.

Elizabeth provides design engineering, construction supervision, staff capacity building, and builder training services to international relief and development agencies. She has performed post-earthquake technical reconnaissance and housing subsector studies following earthquakes in the United States, Iran, Indonesia, Peru, China, and Haiti and regularly contributes to lessons learned and case histories on effective post-earthquake reconstruction.

#### REPRESENTATIVE EXPERIENCE

##### Post-Earthquake Reconnaissance and Housing Subsector Studies

2010: January 12, 2010, Port-au-Prince, Haiti, Earthquake

2009: September 30, 2009, West Sumatra, Indonesia, Earthquake

2008: May 12, 2008, Sichuan, China, Earthquake

2007: August 15, 2007, Pisco, Peru, Earthquake

2007: September 12, 2007, Bengkulu, Indonesia, Earthquake

2007: March 6, 2007, West Sumatra, Indonesia, Earthquake

2006: May 26, 2006, Central Java, Indonesia, Earthquake

2004: December 26, 2004, Banda Aceh, Indonesia, Indian Ocean Earthquake and Tsunami

2003: December 26, 2003, Bam, Iran, Earthquake

2002: January 26, 2001, Bhuj, Gujarat, Earthquake

#### EDUCATION

Doctor of Philosophy in Civil Engineering  
Major: Geotechnical Engineering  
Minors: Structural Engineering, Seismology

Jane Lewis Fellowship Recipient  
University of California, Berkeley, CA

Master of Science in Civil Engineering  
University of California, Berkeley, CA

Master of Science in Environmental Science  
University of Colorado, Denver, CO

Bachelor of Science in General Engineering

President, Gamma Epsilon  
University of Illinois, Urbana-Champaign, IL

#### PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers, Associate Member

Earthquake Engineering Research Institute, Member

University of California, Department of Civil and Environmental Engineering, Academy of Distinguished Alumni, 2014

Ashoka-Lemelson, Fellow, 2009

Draper Richards Kaplan, Fellow, 2006

Echoing Green, Fellow, 2004

Fulbright Scholar to India, 2002-2003

## Key Personnel (Continued)

### Elizabeth Hausler, Ph.D. Founder & CEO

2001: February 28, 2001, Nisqually, WA, Earthquake

#### Technical Projects

Conduct Training in Seismic Design and Construction Practices for New Construction and Seismic Retrofit Projects, the Haiti Ministry of Public Works (MTPTC) and UNOPS, Port-au-Prince, Haiti

Expanding Earthquake-Resistant Housing Construction Training, Cisco Foundation, China

Earthquake-Resistant Design and Construction Vocational Training Program for Students and Teachers, Caterpillar Foundation through Give2Asia, West Sumatra, Indonesia

Transitional Shelter and NFI Relief for Populations Affected by the West Sumatra Earthquake, USAID through Mercy Corps, West Sumatra, Indonesia

Earthquake Recovery and Rural Housing Rehabilitation, USAID through The Asia Foundation, Sichuan, China

Capacity Building in Sichuan, 2008 Tech Awards Cash Prize, Sichuan, China

Technical Assistance and Capacity Building, Timken Foundation, Sichuan, China

Develop Drawings, BOQs, Inspection Checklists and Training Modules, Mercy Corps and Echoing Green, Sichuan, China

Post-Earthquake Technical Reconnaissance Study, University of California and Sichuan University, Sichuan, China

Technical Assistance and Capacity Building, Alwaleed bin Talal Foundation, West Sumatra, Indonesia

Development of Simple Methods for Testing Materials and Construction Quality, Andalas University, West Sumatra, Indonesia

Design Review and Construction Supervision, International Organization for Migration (IOM), Banda Aceh, Indonesia

Design Review, Construction Supervision, and Training of Trainers, CARE International Indonesia, Banda Aceh, Indonesia

Builder Training, Design Review, and Construction Supervision, Australia AID through HK Logistics, Banda Aceh, Indonesia

Develop Drawings, BOQs, Inspection Checklists and Construction Inspection Services, Catholic Relief Services, Banda Aceh, Indonesia

Develop Drawings, BOQs, Inspection Checklists and Training Modules, Mercy Corps, Banda Aceh, Indonesia

Develop Designs and Supervise Construction and Materials Procurement, Mercy Corps, Banda Aceh, Indonesia

Technical Reconnaissance and Lessons Learned for Post-Earthquake Housing Reconstruction in Iran, EERI, Bam, Iran

Lessons Learned from Post-Earthquake Housing Reconstruction in India and Development of Construction Manual for Earth-Based Earthquake-Resistant Houses, EERI, Gujarat, Uttaranchal, and Maharashtra, India

#### Additional Employment Experience

Fulbright Fellow, Bombay and Bhuj, India

Staff Engineer, Dames & Moore, Denver, CO and Salt Lake City, UT

Staff Consultant, Peterson Consulting Limited Partnership, Chicago, IL

Bricklayer, Don Hausler Masonry Construction, Plano, IL

#### SELECT LECTURES AND SPEECH ENGAGEMENTS

Presentation at TEDxPatanSalon, June 19, 2015, streamed live to Kathmandu, Nepal

Presentation on "Adaptation of a Simplified Engineering System for Seismic Evaluation and Reinforcement Design of Earthquake-Resistant Housing for Bogotá", Seventh National Conference on Earthquake Engineering (IIV Congreso Nacional de Ingeniería Sísmica), May 27-29, 2015, Bogotá, Colombia

Panelist on "Rebuilding in Nepal" World Affairs Council, May 13, 2015, San Francisco, California

## Key Personnel (Continued)

### Elizabeth Hausler, Ph.D. Founder & CEO

Presentation about disaster-resilient housing and homeowner-driven reconstruction, Ashoka Global Innovator Series, February 5, 2014, Quezon City, Philippines

Panelist at “The Studio: Redesigning Infrastructure”, World Economic Forum Annual Meeting, January 22, 2015, Davos, Switzerland

Attendee at Clinton Global Initiative Latin America, December 8, 2013, Rio de Janeiro, Brazil

Keynote Speaker at “Build Change: Saving Lives through Better Buildings”, The Tech Awards Summit, November 13, 2013, San Jose, CA

Presentation on “Build Change: Incentives and Technical Assistance for Earthquake-Resistant Housing and Improving Construction Practices in At-Risk Cities”, The Emerging and Sustainable Cities Initiative Meeting of the Inter-American Development Bank (IDB), October 22, 2013, Washington, D.C.

Panelist at “Scalable Ideas: Pitching for Partnerships” session, Clinton Global Initiative 2013 Annual Meeting, September 26, 2013, New York City, NY

Participant at “Doing Well by Doing Good”, Biennial of the Americas, July 18, 2013, Denver, CO

Presentation about Build Change’s experience working in post-disaster housing reconstruction in Haiti and the organization’s success in improving materials quality and the livelihoods of local blockmakers, Haiti Event in Liechtenstein, June 12, 2013, Triesen, Liechtenstein

Presentation at 2013 RMS Exceedance Conference, May 9, 2013, Boston, MA

Facilitator at “Building Resilience to Natural Disasters” session, 2013 World Economic Forum on Latin America, April 25, 2013, Lima, Peru

Presentation at 2012 abc Continuity Forum, November 12-14, 2012, Miami, FL

Speaker at “Build Change’s model for sustainable earthquake-resistant construction in Haiti, Indonesia and China”, University of Colorado Denver’s Wirth Chair Sustainability Series event, July 10, 2012, Denver, CO

Panelist at 2012 Interaction Forum / CHF Panel, May 2, 2012, Washington, D.C.

Panelist at “Assistance to Developing Countries”, Annual Meeting of the American College of Construction Lawyers, February 24, 2012, Laguna Beach, CA

Panelist at “Maximizing Infrastructure Returns”, Annual Meeting of the World Economic Forum, January 26, 2012, Davos, Switzerland

Presentation at pre-World Economic Forum meet-up co-sponsored by the Schwab Foundation, SoSense, HUBZurich, and CreditSuisse, January 23, 2012, The Hub Zurich, Zurich, Switzerland

Delegate at 2011 Opportunity Collaboration, October 16, 2011, Ixtapa, Mexico

Keynote Speaker at 36th Annual Natural Hazard Workshop, Natural Hazards Center at the University of Colorado, July 10, 2011, Boulder, CO

Keynote speaker and master class instructor at Lemelson-MIT Eureka Fest 2011, June 16, 2011, Boston, MA

Presentation about Build Change, Hilti Foundation, April 7, 2011, Liechtenstein

Presentation at “Earthquakes Without Borders”, 2011 EERI Annual Meeting, February 9, 2011, La Jolla, CA

Presentation on Build Back Better Communities (BBBC) Haiti, January 31, 2011, Port-au-Prince, Haiti

Presentation on “A Global Summit of Housing Entrepreneurs”, Ashoka Full Economic Citizenship Program Seminar, November 30, 2010, Barcelona, Spain

Keynote Speaker at Social Enterprise Summit, “International Symposium: Social Innovation in the 21st Century”, November 19, 2010, Hong Kong, China

Keynote Speaker at SWISSNEX USA, “Rebuilding After Disaster”, November 5, 2010, San Francisco, CA

Lecture: “Rebuilding Safe, Satisfactory, and Sustainable Houses after Earthquakes”, University of California, Berkeley: CITRIS Seminar, November 4, 2010, Berkeley, CA

Panel Member: “Advancing Development by Design”, Clinton Global Initiative, September 9, 2010, New York, NY

Presentation at “Haiti Earthquake-Resistant Housing Experts’ Roundtable”, sponsored by Zakat Foundation, March 4, 2010, Port-au-Prince, Haiti

## Key Personnel (Continued)

### Elizabeth Hausler, Ph.D. Founder & CEO

Presentation on “Earthquake-Resistant Confined Masonry Housing Design and Construction: Problems, Solutions and Future Research”, Nanyang Technological University, April 18, 2008, Singapore

Presentation on “Experiences with Confined Masonry Design, Construction, and Training in Indonesia”, International Workshop on Development of a Training Program and Implementation Plan for Confined Masonry Construction, Indian Institute of Technology, January 26, 2008, Kanpur, India

Presentation on “Build Change: Earthquake-Resistant Housing Reconstruction in Aceh after the 2004 Indian Ocean Earthquake and Tsunami”, SEAONC Young Members Forum, Seminar with Tim Hart, SE, October 18, 2007, San Francisco, CA

Presentation on “Performance of Confined Masonry Houses During Earthquakes in Indonesia: Successes, Problems and Solutions”, International Symposium on Disaster in Indonesia: Problems and Solutions, July 28, 2007, Padang, Indonesia

Presentation on “Seismic Hazard in Aceh”, BRR Office of Housing and Human Settlements, Housing Workshop, January 18, 2007, Banda Aceh, Indonesia

Presentation on “Improving Construction Quality in Post-Tsunami Housing Reconstruction”, BRR Office of Housing and Human Settlements, Housing Workshop, August 10, 2006, Banda Aceh, Indonesia

Presentation on “Sustainable Earthquake-Resistant Housing Reconstruction in Tsunami-Devastated Aceh, Indonesia”, 8th National Conference on Earthquake Engineering, Special Session on Low-Cost Housing For Developing Countries, April 20, 2006, San Francisco, CA

Presentation on “Earthquake-Resistant Design and Construction of Confined Masonry Houses for Aceh”, UN-HABITAT-Hosted Seminar, May 18, 2006

Presentation on “Long-Term Change in Construction Practice Through Post-Earthquake Reconstructions”, 1st International Conference on Urban Disaster Reduction, January 18, 2005, Kobe, Japan

Presentation on “Sustainable Disaster-Resistant Housing Construction in Developing Countries”, Engineers for a Sustainable World National Conference, Stanford University, October 2, 2004, Stanford, CA

Presentation on “Sustainable Disaster-Resistant Housing Construction in Developing Countries”, Sustainable Resources 2004, Sustainable Building Solutions Session, University of Colorado, Boulder, October 1, 2004, Boulder, CO

Presentation on “Housing Reconstruction and Retrofitting After the 2001 Kachchh, India Earthquake”, 13th World Conference on Earthquake Engineering, August 5, 2004, Vancouver, Canada

Presentation on “Housing Reconstruction and Retrofitting Following the 2001 Bhuj, India and 2003 Bam, Iran Earthquakes: Design, Implementation and Long-Term Impacts”, International Institute of Earthquake Engineering and Seismology, June 6, 2004, Tehran, Iran

Presentation on “Case Histories of the Seismic Performance of Sites with Ground Improvement as Liquefaction Mitigation”, ASCE Geotechnical Group Spring Seminar, April 3, 2004, Seattle, WA

Presentation on “Earthquake-Resistant Housing for Developing Countries: Lessons From the Field”, UNESCO/AAAS/WFEO International Focus: Engineering and Technology for Poverty Eradication, March 22, 2004, Washington, D.C.

Speech on “Rural Housing Reconstruction After the 2001 Kachchh, India Earthquake”, Sustainable Resources 2003, Shelter and Infrastructure Alternatives, October 3, 2003, University of Colorado, Boulder, CO

Speech on “Influence of Ground Improvement on Settlement and Liquefaction During Strong Shaking”, University of California, Davis Geotechnical Group Seminar, November 27, 2002, Davis, CA

Presentation on “Performance of Improved Ground Under Strong Seismic Shaking”, Hayward Baker Ground Modification Seminar, September 18, 2002, Concord, CA

Presentation on “Mitigation of Liquefaction Hazard”, University of California - Berkeley Extension Short Course on Evaluation and Mitigation of Seismic Hazards, August 9, 2002, Berkeley, CA

Presentation on “Influence of Ground Improvement on Settlement and Liquefaction: A Comparison of Dynamic Centrifuge Tests at Two Centrifuge Centers”, International Conference on Physical Modelling in Geotechnics, July 10, 2002, St. John's, Newfoundland

Presentation on “Influence of Improvement Depth Using Cement Deep Mixing Under Conditions of Blast-



## Key Personnel (Continued)

### Elizabeth Hausler, Ph.D. Founder & CEO

Induced Liquefaction", U.S.-Japan Workshop on Seismic Performance of Urban, Reclaimed and Port Areas-Full Scale Experiment at Tokachi Port, June 25, 2002, Miura, Japan

Presentation on "Performance of Improved Ground", Pacific Earthquake Engineering Research Center Annual Meeting, January 18, 2002, Oakland, CA

Presentation on "Performance of Soil Improvement Techniques Under Strong Seismic Loading, A Summary Report and Status Update", U.S.-Japan Cooperative Research Program on Urban Earthquake Disaster Mitigation, Third Grantees Meeting, August 15, 2001, Seattle, WA

Presentation on "Case Histories on the Performance of Soil Improvement Techniques in Earthquakes", Port and Airport Research Institute, Ministry of Transport, Japan, August 9, 1999, Kurihama, Japan

#### MANUALS AND GUIDELINES

Hausler, E. A., Building Back Housing in Post-Disaster Situations – Basic Engineering Principles for Development Professionals: A Primer, Publication of U.S. Agency for International Development, January 2012.

Contributing Author, Site and Retaining Wall Hazard Mitigation in Post-Disaster Situations: A Primer, Publication of U.S. Agency for International Development, draft pending USAID review.

Contributing Author, Seismic Retrofit of Housing in Post-Disaster Situations – Basic Engineering Principles for Development Professionals: A Primer, Publication of U.S. Agency for International Development, draft pending USAID review.

Housing Reconstruction and Retrofitting After the 2001 Kachchh, Gujarat Earthquake, 13th World Conference on Earthquake Engineering, 2004, Paper No. 1723.

Long-term Change in Construction Practice Through Post-Earthquake Reconstructions, 1st International Conference on Urban Disaster Reduction, January 17-20, 2005, Kobe, Japan.

Construction manual for single-family housing using stabilized rammed earth technology with earthquake-resistant design, 2003.

#### SELECT PUBLISHED AND SUBMITTED ARTICLES

Hausler Strand, E. A., How the private sector can soften the blow of disasters. World Economic Forum blog, April 21, 2015.

Hausler, E. A., Earthquake-Resistant Houses, Innovations Journal: Build Back Better, Strategies for Societal Renewal in Haiti, 91-115. MIT Press, Volume 5, Issue 4, Fall 2010.

Hausler, E. A. in press. Design and Construction of Confined Masonry Houses in Indonesia: Challenges, Performance in Earthquakes, and Need for Future Research.

Contributing Author, EERI Learning from Earthquakes Program Special Earthquake Report, Observations on the Southern Sumatra Earthquakes of September 12-13, 2007, November 2007.

Contributing Author, EERI Learning from Earthquakes Program Special Earthquake Report, The Mw 6.3 Java, Indonesia Earthquake May 27, 2006, August 2006.

Hausler, E. A. in preparation. Change in Construction Practice Through Post-Earthquake Reconstruction Programs in India, Earthquake Engineering Research Institute Lessons Learned Over Time Program.

Khazai, B. & Hausler, E. A., Intermediate Shelters in Bam and Permanent Shelters in the Villages following the Bam, Iran Earthquake, EERI Earthquake Spectra, 2005.

Hausler, E. A., Long-Term Change in Construction Practice Through Post-Earthquake Reconstructions, 1st International Conference on Urban Disaster Reduction, Kobe, Japan, January 2005.

Hausler, E. A., Housing Reconstruction and Retrofitting After the 2001 Kachchh, India Earthquake, 13th World Conference on Earthquake Engineering, Vancouver, BC. Paper 1723. 2004.

Hausler, E. A. & Koelling, M., Performance of Improved Ground During the 2001 Nisqually Earthquake, Fifth International Conference on Case Histories in Geotechnical Engineering, New York, NY. April 13-17, 2004. Paper 3-27.

## Key Personnel (Continued)

### Elizabeth Hausler, Ph.D. Founder & CEO

Hausler, E. A., Sitar, N., Matsuo, O., & Okamura, M., Influence of Ground Improvement on Settlement and Liquefaction: A Comparison of Dynamic Centrifuge Tests at Two Centrifuge Centers, International Conference on Physical Modelling in Geotechnics, St. John's, Newfoundland, July 10-12, 2002, 557-562.

Hausler, E. A. & Sitar, N., Performance of Soil Improvement Techniques in Earthquakes, Fourth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego, CA. Paper 10-15. 2001.

## Key Personnel



M. Lisbeth B. Collins, S.E.  
Director of Engineering

### EDUCATION

Masters of Science in Structural Engineering  
Mechanics and Materials  
University of California Berkeley, CA

Bachelor of Science in Engineering in Civil  
Engineering  
Princeton University, NJ

### PROFESSIONAL LICENSES

TYPE	STATE	NUMBER
Structural Engineer	CA	S5644
Professional Engineer	CA	C72770

### PROFESSIONAL AFFILIATIONS

USGBC LEED Accredited Professional

Earthquake Engineering Research Institute, Member

American Society of Civil Engineers, Member California

Safety Assessment Program, Registered  
Disaster Service Worker, Volunteer (SAP #63688)

M. Lisbeth (Lizzie) Blaisdell Collins is the Director of Engineering for Build Change. She is responsible for controlling the quality of design information and implementation for projects in all of Build Change's programs.

Lizzie articulates a comprehensive understanding of the structural engineering design resources of Build Change and oversees the development of new resources. She represents Build Change in technical discussions on design resources and building standards and in advocacy with government officials, partners, and clients.

### REPRESENTATIVE EXPERIENCE

#### Post-Earthquake Reconnaissance and Housing Subsector Studies

2006: October 15, 2006, Hawaii, HI, Earthquake

2015: April 25, 2015, Gorkha Nepal, Earthquake

2016: April 16, 2016, Manta & Perdenales, Ecuador, Earthquake

### Technical Projects

Seismic Evaluation and Retrofit Training for Caja de la Vivienda Popular, City of Bogota, Colombia

Seismic Evaluation and Retrofit Training, Build Change, Port-au-Prince, Haiti

Post-Earthquake Housing Reconstruction Technical Assistance Program with Seismic Evaluation and Retrofit Training, CARE-Haiti, Port-au-Prince, Haiti

16/6 Housing Reconstruction Morne Hercule Pilot Project Structural Assistance, UNOPS, Port-au-Prince, Haiti

School Design and Construction Supervision Architecture for Humanity, College Coeur Immacule de Marie, Port-au-Prince, Haiti

Ecole Frere Ivener School Structural Peer Review, Port-au-Prince, Haiti

Office Building Seismic Evaluation, Delmas 40B, Port-au-Prince

Leased Buildings Seismic Assessments, HELP, in Port-au-Prince, Haiti

Masonry Wall Testing Facility, Build Change, Port-au-Prince, Haiti

Office Building Structural Condition Assessment with Engineer Minouche Barony, Gonaïves, Haiti

## Key Personnel (Continued)

### M. Lisbeth B. Collins, S.E. Director of Engineering

#### Seismic Rehabilitation Projects

LAMIKA Physical Renewal Housing Improvement Program, Campeche, Carrefour Feuilles, Global Communities for the American Red Cross, Port-au-Prince, Haiti, 2014

Immediate Occupancy Seismic Upgrade, Confidential Technology Client, Fremont, CA

Twelve School Seismic Evaluations and Strengthening Recommendations in Marchand-Dessalines, Save The Children, Port-au-Prince, Haiti

Primary and Secondary School Seismic Evaluations and Strengthening in Saint Marc, Rossignol, and Arcahaie, Salvation Army, Haiti

Ecole National Republic d'Argentine School Rehabilitation, Architecture for Humanity, Haiti Pre-lease Structural Assessment and Strengthening Scheme, Delmas 40B, Port-au-Prince, Haiti Retrofit Quality Assurance Evaluation, Delmas 32, J/P HRO, Haiti

Delmas 49 School Pre-lease Seismic Assessment, J/P HRO, Port-au-Prince, Haiti School of Hope Seismic Retrofit, J/P HRO, Port-au-Prince, Haiti

Evaluation and Conceptual Rehabilitation of Lycée des Jeunes Filles for Islamic Relief Haiti, Port-au-Prince, Haiti Civic Arts Building Rehabilitation and Seismic Strengthening, Hercules, CA Voluntary Seismic Upgrade Program, Confidential Food Manufacturing Facility, CA

Seismic Evaluation and Retrofit Guidelines for Haitian Masonry Housing, Volunteer Team Member

#### Commercial Engineering Projects

YUNUS Social Business Haiti SA Poultry Farm Structural Evaluation, Nicolas, Haiti

Corporate Headquarters Entrance and Executive Briefing Center, Confidential Client, Palo Alto, CA

B1 Cleanroom Fab Expansion, Confidential Technology Client, Fremont, CA

Campus Seismic Assessment Program, Confidential Technology Client, CA

Building Occupancy Resumption Program, Confidential Food Manufacturing Facility, CA Seismically Isolated Raised Access Floor Design and Consulting, CA

New Lab, Cafeteria and Office Space, Confidential Technology Client, Sunnyvale, CA Bay 19 Fab Expansion, Confidential Technology Client, Fremont, CA

#### Civic Engineering Projects

Nine National Schools in Sud, Sud-Est, Nippes and Grand Anse for EXECO S.A., Haiti

Orange County Cogeneration Plant, Santa Ana, CA

Egyptian Consulate Renovation and Seismic Upgrade, San Francisco, CA

#### Additional Employment Experience

Project Engineer and Engineering Manager, Degenkolb Engineers, San Francisco, CA, USA and Port-au-Prince, Haiti

Intern, Designer, and Design Engineer, Degenkolb Engineers, San Francisco, CA

#### SELECT LECTURES AND SPEECH ENGAGEMENTS

Presentation on "Adaptation of a Simplified Engineering System for Seismic Evaluation and Reinforcement Design of Earthquake-Resistant Housing for Bogotá", Seventh National Conference on Earthquake Engineering



## Key Personnel (Continued)

### M. Lisbeth B. Collins, S.E. Director of Engineering

(IIV Congreso Nacional de Ingeniería Sísmica), Bogotá, Colombia. May 27-29, 2015

Panelist on "The Role of Structural Engineers in Sustainable Development and Poverty Reduction", Structures Congress 2015, Portland, OR. April 25, 2015

Panelist on "Using Cost-Effective Technology to Foster Resiliency: the Case for Retrofitting" with Build Change colleagues, World Urban Forum 2014, Medellín, Colombia. April 10, 2014

"Inspiration to Impact" Autodesk University, Las Vegas, NV. December 2015

"Experiencias de Reconstrucción con Enfoque Preventivo en Varios Países" Barrio Mío, Alianza Estratégica para la Transformación de Comunidades en Alto Riesgo en Resilientes y Productivas, Guatemala, Guatemala. June 11, 2014

Presentation and Author, "Immediate Occupancy Upgrade of an Operating High-Tech Manufacturing Facility", 2009 ATC-SEI Conference on Improving the Seismic Performance of Existing Buildings and Other Structures, San Francisco, CA

#### MANUALS AND GUIDELINES

Reviewer, Construction Quality Observation Handbook for Disaster-Resistant School Construction, Philippines  
Seismic Evaluation and Retrofit Manual for Small Masonry Homes, Guatemala, in progress

Contributing Author: A Practical Handbook for Safe Housing Expansion, Haiti

Contributing Author: Seismic Evaluation and Retrofit Guidelines for Haitian Masonry Housing

Seismic Evaluation and Retrofit Manual for the Reduction of Vulnerability in Houses, Colombia

Contributing Author: Residential Design and Construction Guidelines for the Philippines

Seismic and Wind Evaluation and Retrofit Manual for Timber Housing Construction in the Philippines, in progress

#### SELECT PUBLISHED AND SUBMITTED ARTICLES

Author, "Five Common Myths about Building Performance and Business Continuity after an Earthquake in the Bay Area," CREW SF The View newsletter, 4th Quarter 2012.

Blaisdell, M.L., Mitchell, A., Johnston, L., "Immediate Occupancy Upgrade of an Operating High-Tech Manufacturing Facility", 2009 ATC-SEI Conference on Improving the Seismic Performance of Existing Buildings and Other Structures, San Francisco, CA.

Garlock, M, Li, J., Blaisdell M.L. (2006). "Floor Diaphragm Interaction with Self-Centering Steel Moment Frames", Proceedings of the 8th U.S. National Conference on Earthquake Engineering (NCEE), San Francisco, CA.

Blaisdell, M.L., Hausler Strand, E., Caballero, J. (2015). "Adaptation of a simplified engineered approach to housing seismic evaluation and retrofit design for use in Bogotá", VII Congreso Nacional de Ingeniería Sísmica, Bogotá, Colombia

Poster, "Post-earthquake Seismic Retrofit Programs for Improved Reconstruction" ATC-SEI 2nd Conference on Improving the Seismic Performance of Existing Buildings and Other Structures, San Francisco, CA. December 2015

## Key Personnel



### EDUCATION

Diploma in Electromechanical Engineering  
I.E.S. Josep Brugulat, Catalunya, Spain

Bachillerato Unificado Polivalente  
I.E.S. Josep Brugulat, Catalunya, Spain

### PROFESSIONAL AFFILIATIONS

Registered Engineers for Disaster Relief (RedR) UK,  
Member

## Michael Collins Director of Education

Michael Collins is the Director of Education for Build Change. He oversees the capacity building programs in each country where Build Change operates. He is responsible for ensuring the quality of trainings for builders and homeowners, as well as the practical skills of Build Change engineers. He is instrumental in designing and implementing training programs for local builders, architects, and engineers.

Michael is also responsible for overseeing the quality assurance team in its efforts to ensure that houses Build Change engineers supervise meet the minimum standards for earthquake-resistant construction.

### REPRESENTATIVE EXPERIENCE

#### Project Management

Program Manager, Build Change, West Sumatra, Indonesia

- Responsible for the management and capacity building of a team of 18 staff, including general organization, logistics, implementation methods, teaching material, budgeting, staffing, monitoring, and evaluation

Project Manager, Comunidad Humana, Tibet, China

- Responsible for the planning, design, tendering and construction management of boarding schools in Tibet's remote nomadic communities
- Negotiated memorandums of understanding with government authorities, worked alongside local contractors in improving and streamlining construction procedures, engaged and worked alongside local communities

General Manager, Collins & Thompson, Girona, Spain

- Directly oversaw the construction or restoration of 6 large scale farmhouses, juggling a total budget of over €4 million.

### MANUALS AND GUIDELINES

Contributing Author, The Secrets of Earthquake-Resistant Construction, Haiti, 2013.

Contributing Author, Retrofit Picture Guide: Visual Aid in the Execution of Seismic Retrofits, Haiti, 2013.

Contributing Author, Challenges and Opportunities in the Production and Purchase of Good Quality Blocks, with Save The Children, Haiti, 2012.

Contributing Author, Guide de Renforcement Parasismique et Paracyclonique des Bâtiments, for Haiti Ministère des Travaux Publics, Transports et Communications (MTPTC), with World Bank, UNOPS, Miyamoto, Cooperation Suisse, and Degenkolb Engineers, Haiti, 2012.

## Key Personnel



### EDUCATION

Master of Business Administration in Finance  
University of Chicago, Chicago, IL

Bachelor of Science in Finance  
Miami University of Ohio, Oxford, OH

## Tim Louis Director of Finance & Administration

Tim Louis is the Director of Finance & Administration for Build Change. Tim is first and foremost responsible for the overall financial well-being of Build Change. Tim oversees all accounting, banking and budgetary matters, as well as reporting to and invoicing clients, preparing proposals for potential grants and contracts, audit oversight, project tracking and reporting and communicating financial results to the Board of Directors. Tim manages all general business matters including human resources, legal, recruiting, facilities management, insurance, vendor management, security, technology, communications and more.

Tim began his association with Build Change in 2004 when he was one of the Build Change founding Board Members and has been involved as it has grown into a multi-million dollar international social enterprise providing culturally appropriate, sustainable, earthquake-resistant solutions across the developing world.

### REPRESENTATIVE EXPERIENCE

#### Finance

Consultant, Verizon Business, San Francisco, California

- Contact center expert and telecommunications consultant

Consultant, Technology Finance Partners, Inc., San Francisco, California

- Providing financial solutions to clients in the high-tech and telecommunications industries.

Consultant, Peterson Consulting, Chicago, Illinois

- Forensic economic and accounting analyses related to a wide array of commercial litigation matters

## Key Personnel



### EDUCATION

Master in Audit & Management of Organizations  
Speciality: Management of Small- and medium-sized enterprises  
Université du Maine, Le Mans, France

Bachelor of Economics & Management of Enterprises  
Université Aix-Marseille 2, Pavia, Italy

## Aline Séjourné Director of Fund Development & Impacts

Aline Séjourné is Director of Fund Development & Impacts, based in New York City. Aline was previously the Country Director for Build Change's Haiti office, where she was responsible for implementing Build Change's homeowner-driven housing reconstruction, retrofitting and training programs in Haiti.

### REPRESENTATIVE EXPERIENCE

Block Manufacturing Program Manager, Build Change, Port-au-Prince, Haiti

- Lead the block manufacturing program expansion, with the goals of increasing use of higher quality concrete building materials and incomes for block makers and their employees. Oversee the training and support to block manufacturers in Port au Prince, as well as in other areas of Haiti. Develop the Network of Certified Construction Professionals

Livelihoods Project Manager, J/P Haitian Relief Organization (J/P HRO), Port-au-Prince, Haiti

- Supervise the Livelihoods activities within the Community Development Department: Rubble Recycling and Business Creation, Business Opportunities Analysis through Local Consumption Study, Neighborhoods Rehabilitation; manage the Livelihoods department (strategy, budget, staff, monitoring and evaluation, relationships with donors)

Program Specialist, International Development Law Organization, Port-au-Prince, Haiti

- 8-month consultancy to represent the organization locally, and coordinate the research project on "Resolution of Legal Aspects of Land Tenure/Re-Housing in Haiti, after the earthquake"

Small Business Management Specialist, Mercy Corps, Port-au-Prince, Haiti

- 2-month consultancy to design and deliver a business management training session for small business owners

Business Development Services Officer/Trainer, Fonkoze, Port-au-Prince, Haiti

- 12-month consultancy to develop the Business Development Services component, and to deliver a business management training to small business owners

Microfinance Researcher/Project Assistant, IDLO, Rome, Italy

- Conduct research on microfinance legal and technical issues, such as credit bureaus, consumer protection, migrants' remittances; collaborate in writing and editing publications on microfinance issues.

### SELECT PUBLISHED AND SUBMITTED ARTICLES



## Key Personnel (Continued)

### Aline Séjourné Director of Fund Development & Impacts

Microfinance regulation in Mauritania: Opportunities and challenges – Cheikh Thiam, Aline Séjourné, Arthur Goujon, 2010.

Risk Centralization Map in Africa – Aline Séjourné, Arthur Goujon, 2010.

The legal incapacity of married women and restrictions on freedom of economic action, Burundi, Cameroon and Democratic Republic of Congo, Edwige Antoinette Tchaha Emaleu Kamei, Innocent Gere Kwagaleme, Gabin Simbananiye, 2008 (Editing by Arthur Goujon, Aline Séjourné and Simone di Castri).

## Key Personnel



### EDUCATION

Post-Graduate Certificate in International Project Management  
Humber College, Toronto, Canada

Bachelor of Arts in International Development, with honours  
University of Guelph, Guelph, Canada

## Kate Landry Country Director, Philippines

Kate Landry is the Country Director in the Philippines. Kate is responsible for delivering on scope, schedule and budget for Build Change's innovative technical assistance and training projects in the Philippines, towards the organization's strategic objective of impacting 10 million people in the next 10 years.

Kate identifies, builds and manages partnerships with government agencies, multilateral organizations, national and international NGOs and Philippine funders, finding innovative ways to scale housing and school construction and retrofitting programs, and tracking their impacts.

### REPRESENTATIVE EXPERIENCE

#### Project Management

Projects Officer, Building Markets, Ottawa, Canada

- Provided program management, coordination, operational and administrative support to three international projects, including the start-up of a Haiti program

Partnership Development and Reporting Manager, Build Change, Port-au-Prince, Haiti

- Provided program coordination, donor liaison and reporting for funded projects
- Wrote detailed technical proposals for international donors such as USAID, EuropeAid, Red Cross national societies, the Caritas network and other humanitarian, multi-lateral and non-profit agencies
- Secured over \$3 million in funding and significantly diversified the organization's donor base

#### Additional Employment Experience

Market Researcher, Building Markets, Kabul, Afghanistan

- Directed the market research department, expanded organizational knowledge of the Afghan marketplace and identified new business opportunities

### SELECT LECTURES AND SPEECH ENGAGEMENTS

Presentation on "Using Cost-Effective Technology: The Case for Retrofitting" at the IGNITE Stage, Third UN World Conference on Disaster Risk Reduction (WCDRR), March 14-18, 2015, Sendai City, Japan

Presentation at OPARR/World Bank Focus Group on Community-Driven Development, December 2014, Manila, Philippines

Presentation at World Bank Knowledge Sharing Conference, September 2014, Manila, Philippines

## Key Personnel (Continued)

### Kate Landry Country Director, Philippines

Presentation at Social Housing Finance Corporation (SHFC), Workshop for Design on Yolanda, July 2014, Philippines

Presentation at CSR Asia Disaster Preparedness Forum 2014, July 22, 2014, Manila, Philippines

## Key Personnel



### EDUCATION

Master of Public Administration in Financial Administration  
Indiana University School of Public and Environmental Affairs, Bloomington, IN

Bachelor of Science in Business Economics  
Indiana University Kelley School of Business, Bloomington, IN

Bachelor of Arts in Political Science  
Indiana University - Bloomington, Bloomington, IN

## Noll Tufani Country Director, Nepal

Noll is responsible for implementing Build Change's owner-driven housing reconstruction and retrofitting programs in Nepal. He also ensures the efficient delivery of effective trainings to masons and builders on earthquake-resistant construction and oversees the monitoring and evaluation system for all of Build Change programs in Nepal.

Noll Tufani has 14 years' experience in operations and business management and was instrumental in establishing our Haiti operations. Noll oversaw project delivery and resource-allocation across the Haiti programs for four years, before moving to Nepal in August 2015 to direct the Build Change program there.

### REPRESENTATIVE EXPERIENCE

#### Administration & Management

Country Director, Build Change Nepal, Kathmandu, Nepal

- Responsible for implementing Build Change's homeowner-driven housing reconstruction programs in Nepal
- Donor relations and partnership development, advocacy and coordination with Government of Nepal

Country Director / Acting Country Director, Build Change Haiti, Port-au-Prince, Haiti

- Responsible for implementing Build Change's homeowner-driven housing reconstruction and retrofitting programs in Haiti (1,400 new families living in disaster resistant houses from 2011 to 2014)
- Donor relations and partnership development, advocacy and coordination with Government of Haiti

Director of Finance and Operations, Build Change Haiti, Port-au-Prince, Haiti

- Opened and equipped Build Change's office in Haiti, hired national staff and put in place all finance, administration, support, and security systems
- Budget tracking, finance, payroll, financial reporting, procurement, and inventory control

Finance & Administration Manager, American Refugee Committee, Port-au-Prince, Haiti

- Arrived in Haiti three weeks after the January 2010 earthquake, managed operations at the height of the emergency phase. Opened ARC's office, set-up finance, logistics, systems to support ARC relief activities

Central Fiscal Authority - Budget Development & Municipal Finance Advisor, EU-funded position, United Nations Mission in Kosovo (UNMIK), Pristina, Kosovo

- Designing program review process for central government and 30 municipalities, and in training Kosovar policy-makers in strategic planning and program budgeting

Deputy Director of the Spending Programs Directorate, Department of Reconstruction, EU-funded position, United Nations Mission in Kosovo (UNMIK), Pristina, Kosovo



## Key Personnel (Continued)

### Noll Tufani Country Director - Nepal

- Finalizing Kosovo's 2002-2004 Public Investment Program (\$1.5 billion). Noll assisted in establishing the Kosovo strategic plan and oversaw recording of Kosovo-wide project information in reconstruction database  
Public Investment Analyst, Department of Reconstruction, EU-funded position, United Nations Mission in Kosovo (UNMIK), Pristina, Kosovo
- Prepared Kosovo 2001-2003 Public Investment Program for the sectors of Justice, Police, Customs, Mine Clearing, Public Services & Environment (\$150 million)

#### SELECT LECTURES AND SPEECH ENGAGEMENTS

Presentation on "Five Years After the Earthquake: Mechanisms and Measures of Risk Reduction", Conférence Internationale Sur la Conception Parasismique des Structures (CICPS), January 9, 2015, Port-au-Prince, Haiti

## Key Personnel



### EDUCATION

Master in Project Management  
Universidad para la Cooperación Internacional, San José, Costa Rica

Architect  
School of Architecture, National Autonomous University of Honduras, Tegucigalpa, Honduras

Certification on risk evaluation for existing buildings  
UNDP, Alcaldia de Tegucigalpa, Honduras

### PROFESSIONAL AFFILIATIONS

Colegio de Arquitectos de Honduras, registry number CAHLV-709, Consejo Profesional de Arquitectura, Colombia, Project Management Institute PMP® #1788595

## Juan Caballero, Arch, PMP. Director of Programs and Partnerships, Latin America

Juan Caballero is the Director of Programs and Partnerships in Latin America, spearheading Build Change's preventive approach in Colombia and Guatemala by raising awareness on the urgent need to take tangible action before an earthquake on schools, and housing, both in the public and private sectors. In this capacity, he has led two post-earthquake reconnaissance teams in Colombia and Ecuador, oversees housing subsector studies, develops technical resources, and cultivates partnerships with local public and private sector stakeholders.

Juan began with Build Change as a Project Manager in Haiti in 2012, and has since successfully overseen a pilot retrofit project in Bogotá, Colombia, and in Mixco, Guatemala, with plans to expand the efforts to other major cities in Colombia Guatemala and other Latin American cities. Recently, he was invited to speak before the Andean Parliament on disaster risk reduction and presented at a roundtable in Ecuador following the recent earthquake, and was featured in local newspapers (El Espectador, El Tiempo) as well as through the World Economic Forum blog. Juan earned his Master's degree in Project Management from the Universidad para la Cooperación Internacional, and is an architect from the National University of Honduras, licensed in both Honduras and Colombia.

### REPRESENTATIVE EXPERIENCE

#### Post-Earthquake Reconnaissance and Housing Subsector Studies

2016: April 16, 2016, Manta & Perdenales, Ecuador, Earthquake

2009: May 28, 2009, San Pedro Sula, Honduras, Earthquake

#### Technical Projects

Retrofit Train-the-Trainers, SENA, SwissContact, Bogotá, Colombia

Pre-Disaster Mitigation Programs in Seismically Active Emerging Nations, RMS, Latin America

Training of Engineers, Technicians, and Field Personnel and Seismic Evaluation of Retrofits, CARE, Carrefour, Haiti

Training and Field Support Services for Post-Earthquake Housing Reconstruction, CAFOD, Jacmel, Haiti

Design and Supervision of 30 Earthquake-Resistant Houses and Training of Builders and Homeowners in Delmas 9, French Red Cross, Port-au-Prince, Haiti

Technical Assistance as part of a Proposed Pilot Project for a Housing Finance Package, Sogesol, Port-au-Prince, Haiti

Expansion of Technical Assistance for Homeowner-Driven Housing Retrofitting and Overall Capacity Building of Homeowners and Builders in Delmas 32, J/P HRO, Port-au-Prince, Haiti

## Key Personnel (Continued)

Juan Caballero

Director of Programs and Partnerships, Latin America

Block Manufacturing Program to Build Capacity of Local Blockmakers, Save The Children, Port-au-Prince, Haiti

Technical Assistance for Homeowner-Driven Housing Reconstruction and Retrofit, Capacity Building and Awareness, Cordaid, Port-au-Prince and Carrefour, Haiti

Conduct Training in Seismic Design and Construction Practices for New Construction and Seismic Retrofit Projects, the Haiti Ministry of Public Works (MTPTC) and UNOPS, Port-au-Prince, Haiti

Contractor/designer/supervisor, rehabilitation of 35 school classrooms to serve as computer laboratories, Honduras

Contractor/designer/supervisor, design of purified bottled water plant in Intibucá, Honduras

Contractor/designer/supervisor, design for a 250+ lot residential development in Gracias Lempira, Honduras

Designer/supervisor, restoration and improvement of the Francisco Morazán Mausoleum, San Salvador, El Salvador

Design and construction, adobe house for Zúniga Pérez family, Santa Lucía

Interior design and construction for the fourth floor of Cooperativa Sagrada Familia main building, Comayagüela, Honduras

Design and cost projection, Red Cross Offices, Canadian Red Cross, Comayagua, Honduras

Design and construction, Regional Sagrada Familia Cooperative offices, La Ceiba, Honduras

Design and construction of a house for Ms. H.L. Casco in Col. Miraflores Tegucigalpa

### Additional Employment Experience

Project Manager, Build Change, Port-au-Prince, Haiti and Latin America

Architect, Independent Practice, Tegucigalpa, Honduras

Consultant, International Organization for Migration, Tegucigalpa, Honduras

Architect, Independent Practice, Tegucigalpa, Honduras

### SELECT LECTURES AND SPEAKING ENGAGEMENTS

Presented “Risk Mitigation Strategies in Existing Informal Housing” on a panel at the V UCLG World Summit of Local and Regional Leaders, Bogota, Colombia, October 2016

Presented “Experiences with housing reconstruction: Lessons from other earthquakes” with Build Change colleagues, ULEAM, Manta Ecuador & Parainfo Universidad Tecnico, Portoviejo, Ecuador, April 16, 2016

Panelist on “Using Cost-Effective Technology to Foster Resiliency: the Case for Retrofitting” with Build Change colleagues, World Urban Forum 2014, April 10, 2014, Medellín, Colombia

### MANUALS AND GUIDELINES

Cascales, J., Garcia, E., Caballero, J., Flores, M., & Garcia, M. Architecture and Landscape Guide for Honduras. 2013.

## Key Personnel



### EDUCATION

MA in International Development with Focus on Social Policy and Social Development  
Institute for Development Policy and Management, Manchester, UK

Bachelor of Arts in Geography, Emphasis on Natural Resource Management and Development Studies, South Asia  
San Francisco State University, San Francisco, USA

## Michael Gabriel Haiti Country Director

Michael Gabriel is the Country Director for Build Change in Haiti, based in Port-au-Prince. He is responsible for implementing Build Change's programs in Haiti, which include capacity building for the Ministry of Education for school building structural evaluation, homeowner-driven housing reconstruction, retrofitting and training programs for construction sector workforce and SEM development.

### REPRESENTATIVE EXPERIENCE

Senior Technical Advisor - Social and Economic Development Unit, FHI 360, Washington D.C., USA

- Developed gender capability statements reflecting FHI 360's accomplishments in gender transformation to support various funding applications
- Developed internal SharePoint site for SED New Business development (knowledge sharing and proposal development)

Deputy Chief of Party, FHI 360, Myanmar

- Co-led the startup of \$20 million USAID-funded "Civil Society and Media Project". Special attention was given to organizational capacity development, gender mainstreaming, inclusive and participatory governance, coalition building and advocacy, accountability and financial sustainability
- Oversaw identification and selection of local partners as "Intermediate Support Organizations" to provide capacity strengthening services to civil society actors, and development of OCA and action planning tools
- Participated in development of gender analysis, helped roll out training for all staff on approach to gender, and worked on approach to gender mainstreaming for CSO and media partners to deliver on objectives of more gender-inclusive civil society and media

Senior Program Officer - Southeast Asia, Freedom House, Washington D.C., USA

- Researched new business and developed key partnerships
- Assisted in designing and managing projects in the Southeast Asia regional portfolio, funded by US Department of State and USAID

Country Director, Cord UK, Myanmar

- Set up Myanmar operations, started up and directly managed 2-year EC-funded civil society capacity development project focused on conflict- and gender-sensitive programming
- Designed approach for gender integration and mainstreaming with local partners



## Key Personnel (Continued)

### Michael Gabriel Haiti Country Director

#### Country Director, Mercy Corps, Libya

- Developed country strategy for post-conflict transitional programming and developed over \$4 million in new business from USAID, DFID, UNHCR, and the European Commission to fund emergency response programs for protection and durable solutions for displaced vulnerable communities
- Provided general oversight and direct grant management
- Established M&E and quality management systems, integrating formal all staff training in project cycle management

#### Country Director, Mercy Corps, Myanmar

- Set up office and country operations, developed country strategy for post-disaster programming and longer term economic development, and developed over \$11 million in new business from DFID, EC, UN, foundations and multi-donor funds for humanitarian assistance, civil society strengthening; community resilience, food security and agricultural development; and natural resource management and climate change adaptation
- Oversaw implementation of grants
- Forged and managed strategic relationships with other INGOs, UN agencies, donors and government bodies
- Led the Thematic Group on Food Security and Agriculture, and co-chair the Delta Livelihoods Recovery Working Group

#### Additional Employment Experience

Emergency Team Leader, Mercy Corps, Pakistan-administered Kashmir

Recovery Program Manager, Mercy Corps, Aceh, Indonesia

Program Officer, International Organization for Migration, Afghanistan

Program Officer, International Organization for Migration, Macedonia

Shelter Program Manager, American Refugee Committee International, Kosovo

Field Officer, UN Commissioner for Refugees, Kosovo

#### PUBLICATIONS

Doocy, Shannon and Michael Gabriel et al (2006) - "Implementing Cash for Work Programs in Post-Tsunami Aceh: Experiences and Lessons Learned", Disasters Magazine (30) 3: 277-296

#### PROFESSIONAL ASSOCIATIONS

- Society for International Development (Washington D.C.)
- Organization Development Network
- Humanitarian Practice Network
- Food Security Information Network

## Key Personnel



### EDUCATION

MSc Earthquake Engineering  
European School for Advanced Studies in Reduction of Seismic Risk (ROSE School), Pavia, Italy

MEng (Hons) Structural Engineering and Architecture  
University of Pavia, Faculty of Engineering, Pavia, Italy

Course in Structural Engineering and Architecture, Pavia, Italy

CEng MICE - Chartered Engineer Member, Institution of Civil Engineers (UK)  
Chartered Engineer Member, Institution of Structural Engineers Rovigo (Italy)

## Anna Pavan, Eng. Lead Structural Engineer, Latin America

Anna is a structural engineer with nearly ten years' experience in various countries. She is responsible for implementation of our program in Colombia, assuring quality control of design information and construction process, the development and maintenance of relationships with local stakeholders, and the implementation of the local educational program.

### REPRESENTATIVE EXPERIENCE

Lead Structural Engineer, Build Change, Colombia

- Technical lead for engineering team in all activities
- Coordinating the work of the engineering team in all activities with the input and oversight from the Technical Advisor, Structural Expert and Project Manager
- Ensuring quality and correctness of engineering team work in all activities.

### Post-Earthquake Reconnaissance and Housing Subsector Studies

2017: Post-Earthquake Reconnaissance in response to M8.2 earthquake, Cemex, Mexico

2016: Post-Earthquake Reconnaissance in response to M7.8 earthquake, DfID, Ecuador

### Technical Projects

2016-2017: Reducing seismic risks in informal neighborhoods in Colombia, Lloyd's, SwissRe, Bogotá and Medellin, Colombia

2017: Expert Advice on Home Retrofitting Activities to Mitigate Earthquake Risk, The World Bank, Guatemala

2016: Earthquake- Resistant Rural Schools in San Pedro Carcha, CONI, San Pedro Carcha, Guatemala

2015: Seismic Engineering of National Football Stadium, Government of Venezuela, Caracas, Venezuela

2010-2011: Pro Bono Kindergarten School Construction, SABRE Charitable Trust, Ghana

### Additional Employment Experience

Senior Structural Engineer, Ove Arup & Partners, London, UK and Madrid, Spain

### PUBLICATIONS

Pavan, R. Pinho & S. Antoniou (2008) - "Blind prediction of a full-scale 3D Steel frame tested under dynamic conditions". Paper presented at The 14th World Conference on Earthquake Engineering. October 12-17, 2008, Beijing, China.

## Key Personnel



### EDUCATION

Master of Advanced Studies in Urban Design  
ETH Zurich, D-Arch, Chair for Architecture and Urban Design, Zurich, Switzerland

Master's Degree in Building Engineering and Architecture  
Faculty of Engineering, Università degli Studi di Pavia, Pavia, Italy

Professional License: License for Engineering Professional Practice (Class 4s) in Italy.

## Anna Calogero, Eng.

### Consultant, Global

Anna Calogero is a building engineer/architect with a special interest and expertise in topics related to housing and slum neighborhood upgrading.

Anna has worked extensively for Build Change for 4 years, for Haiti and Nepal programs. For Build Change in Haiti, Anna has been managing and coordinating various housing reconstruction and retrofitting projects in different informal neighborhoods of the Port-au-Prince metropolitan area.

### REPRESENTATIVE EXPERIENCE

Urban and Housing Advisor, EVA Studio LTD, Haiti-UK

- Provided technical advice on public engagement, urban development and affordable housing strategies, participatory design approach.
- Supervised as "Project architect" the construction of three public spaces in Port-au-Prince.

Consultant, ESA Consultance, Haiti

- Project manager for an operational research on civil society participation in urban and neighborhood planification in the informal settlements of Port-au-Prince. Client: Habitat for Humanity, IIIED, funded by DFID (forthcoming publication)

Consultant, Build Change, Nepal

- Provided operational recommendations for staff training, efficiency improvement of the program activities and anticipation of potential implementation issues.

Advocacy and Policy Associate, Build Change, Haiti

- Drafted concept notes for post-hurricane reconstruction programs in rural areas (homeowner-driven housing and community-driven schools);
- Conducted advocacy activities with the national and international early-recovery actors for the use of the homeowner-driven approach in post-hurricane reconstruction programs.

## Key Personnel (Continued)

### Anna Calogero

#### Consultant, Global

Program Manager, Build Change, Haiti

Managed the housing component of the neighbourhood rehabilitation program AIQIP: retrofits and new constructions for 255 safe homes - initiative of the "Unité de Construction de Logement et Batiments Publics" (UCLBP, Haiti), funded by the Agence Française de Développement.

Urban and Housing Subsidy Coordinator, Build Change, Haiti

- Developed Build Change's standard operating procedures for homeowner-driven construction programs;
- Set up the housing approach for the technical services to be provided for the program LAMIKA (LAMIKA\_Factsheet): retrofits and expansions for 500 safe homes - initiative funded by the American Red Cross.

Neighborhood Upgrading Project Manager, J/P Haitian Relief Organization, Haiti

- Managed the "Helping Haiti Home" project: retrofits for 310 safe homes - initiative of the Clinton-Bush Haiti Fund, grant managed by IDB/MIF;
- Set up and managed the "Microplanning in Delmas 32" project: retrofit, reconstruction for 24 homes and public space rehabilitation - J/P HRO and Fondation Architectes de l'Urgence's initiative;
- Coordinated the new construction and retrofit field activities of the project "Helping People Home": safe homes for 129 families - initiative of BMPAD (Haiti), funded by the World Bank.

#### SELECT PUBLICATION AND SPEAKING ENGAGEMENTS

Interview: by Doggerel - Arup for Build Change, in "Mitigating disaster risk in informal communities", <http://doggerel.arup.com/build-change/>

Publication: "Analyses des facteurs de persistance du choléra et élaboration d'un plan d'intervention" with ESA Consultance (published online Etudes\_Cholera by UNICEF)

Publication: Contributor Author "Building Brazil: progressive urban renewal of informal settlements" with MAS Urban design/ETH Zurich, edited by Marc Angélil and Rainer Hehl in collaboration with Something Fantastic, Ruby Press, 2011, Berlin.

## Key Personnel

### Stefano Pompei Project Engineer, Haiti

Stefano is a Project Engineer in Haiti. Stefano oversee the revision or development of new structural and architectural drawings, bills of quantity, construction checklists, and training materials as necessary, for partners and clients. Stefano also mentors and oversees local engineers, architects, drafters, and other technical staff.

Before joining Haiti team, Stefano worked with Build Change Nepal team in 2015.

#### EDUCATION

Masters Degree in Civil Engineering  
Università Politecnica delle Marche, Ancona, Italy

Bachelors Degree in Civil Engineering  
Università Politecnica delle Marche, Ancona, Italy

#### REPRESENTATIVE EXPERIENCE

##### Engineering Projects

Design of emergency house prototype, providing structural and architectural improvements, with the aim to ensure a better strength against wind and earthquakes, TECHO Ecuador. Quito, Ecuador, 2015.

Planning, project management, and design for construction of earthquake-resistant schools, Casas de la Salud. Ica, Peru, 2015

Structural design of glass roofing supported by glass beams, F&M Ingegneria S.p.a. Trieste, Italy. 2013

Supervision of structures for new hospital hub, F&M Ingegneria S.p.a. Monselice, Italy. 2013

Structural design of concrete, steel, masonry for New Prada Foundation Museum, F&M Ingegneria S.p.a. Milano, Italy. 2013

Structural design of R&D center for New Petronas Lubricants, F&M Ingegneria S.p.a. Santena, Italy. 2013

Renovation of historical palace for Louis Vitton, F&M Ingegneria S.p.a. Venice, Italy. 2013

Structural design of steel mezzanine for new Diesel store, F&M Ingegneria S.p.a. Milano, Italy. 2013

Structural design for new shopping center and underground parking, F&M Ingegneria S.p.a. Mestre, Italy. 2013

Structural design of multi-story concrete building for new technology hub and urban renovation, F&M Ingegneria S.p.a. Novara, Italy. 2013

Structural design of span space frame truss, F&M Ingegneria S.p.a. Vado Ligure, Italy. 2013

Structural design of 17 story tower in in-situ RC central core, F&M Ingegneria S.p.a. Cheboksary, Russia. 2013

Preliminary analysis of new 28 story tower, F&M Ingegneria S.p.a. Erbil, Iraq. 2012

Analysis of earthquake vulnerability of existing hospital wing, F&M Ingegneria S.p.a. Dolo, Italy. 2013

##### Additional Employment Experience

Founder of ATePE Italia, which aims to create a common project space between “Global North” and “Global South”, in order to improve the quality of people’s and communities’ lives in which it operates. Recanati, Italy, Present.



## Key Personnel



### Linnel Ballesteros Staff Engineer, Philippines

Linnel Ballesteros joined Build Change as a Staff Engineer in May 2014. Linnel graduated with a Bachelor of Civil Engineering and has previously worked as a civil engineer in the private sector.

In her capacity as Staff Engineer, Linnel provides hands-on technical assistance and training to families, communities, builders and government officials for safe housing and school construction. Linnel supervises progress using transparent monitoring tools, and receives and responds to feedback from stakeholders to implement projects.

#### EDUCATION

Bachelor of Science in Civil Engineering  
University of Cebu, Cebu, Philippines

Certified Welder  
Canadian Welding Bureau Program

#### PROFESSIONAL LICENSES

TYPE	STATE	NUMBER
Civil Engineer	Philippines	0117510

#### PROFESSIONAL AFFILIATIONS

CWB FCAW/GMAW Process, Qualified

Autocad 2010 Training, Certified

Basic Occupational Safety and Health, Certified

#### PROFESSIONAL SKILLS

Autocad 2014, RISA-2D

#### REPRESENTATIVE EXPERIENCE

##### Technical Projects

Technical Assistance and Training for Homeowner-Driven Reconstruction of 50 Houses in Sulangan, Eastern Samar, Philippines

Technical Assistance and Training for Homeowner-Driven Reconstruction of 50 Houses in Maliwaliw, Eastern Samar, Philippines

Technical Assistance and Training for Timber Retrofitting in Ngolos, Guiuan, Eastern Samar, Philippines

Management for Architectural Finishing in Urban Homes, Tipolo, Mandaue City, Cebu, Philippines

Project Management for Deca Clark Residences and Resort in Margot, Angeles City, Pampanga, Philippines

##### Additional Employment Experience

Additional Employment Experience Technical Support Representative, Convergys Philippines, Philippines

Proprietor, Linmar Builders, Philippines

Project Engineer, Laz Caerus Homes, Inc., Philippines

Batching Plant, Slab, and Casting Supervisor, Laz Caerus Homes, Inc., Philippines

Freelance Engineer, BS Simbajon Construction, Philippines

Finishing Supervisor/ Site Supervisor, Neken Homes, Inc., Philippines

# Clients and Partners

## Academia

- Andalus University  
Indonesia in 2008
- University of California  
China in 2008

## Corporations

- All Nippon Airways (ANA)  
General Operations in 2014 - 2016
- Asmar, Schor & McKenna, PLLC  
General Operations in 2012
- The CarbonNeutral Company  
Nepal in 2015 - 2016
- Cimenterie Nationale Haiti  
Haiti in 2015
- Daily Mail and General Trust (DMGT)  
Indonesia in 2010  
General Operations in 2012 - 2014  
Nepal in 2015
- Degenkolb Engineers  
Haiti in 2014
- Digicel  
Haiti in 2015
- Eneco Energy Trade  
Nepal in 2015
- Entremedio  
Haiti in 2014
- Forell/Elsesser Engineers, Inc.  
Haiti in 2009 - 2011  
Nepal in 2015
- Guy Nordenson & Associates  
Haiti in 2010 - 2011
- Hilti Corporation  
General Operations in 2011 - 2013
- HK Logistics  
Indonesia in 2007
- International Resource Group (IRG)  
Technical Consulting in 2012
- Lloyd's Charities Trust  
Colombia 2016 - 2019  
Philippines 2016 - 2019
- Parsons Corporation  
Technical Development in 2013
- Pixlr  
Nepal in 2015
- Risk Management Solutions (RMS)

General Operations in 2011 - 2017  
Latin America in 2013 - 2017  
Nepal in 2015

- Savvy Structures, Inc.  
Haiti in 2010 - 2011
- Sogesol  
Haiti in 2013 - 2014
- The World Bank  
Guatemala 2017  
Indonesia 2017

## Foundations

- Alwaleed bin Talal Foundation  
Indonesia in 2008
- Anonymous Donors via Donor Advised Funds  
Indonesia in 2010-2012  
General Operations in 2011, 2013 - 2014  
General Operations in 2015 - 2016
- Argosy Foundation  
Philippines in 2014
- Ashoka Foundation  
General Operations in 2010 - 2012
- The Asia Foundation  
China in 2010-2011
- Autodesk Foundation  
General Operations in 2014 - 2017  
Nepal in 2015  
Colombia in 2016
- Blue Dawn Foundation  
Haiti in 2012
- Bohemian Foundation  
General Operations in 2012  
Haiti in 2013  
Philippines in 2014 - 2016
- Caterpillar Foundation  
Indonesia in 2009 - 2016
- Cisco Foundation  
China in 2010
- CH2M Hill Foundation  
Technical Consulting in 2014
- Conrad-Shah Family Fund  
General Operations in 2014 - 2015
- The Elmo Foundation  
General Operations in 2013 - 2014  
Nepal in 2015  
General Operations in 2016

## Clients and Partners (Continued)

### Foundations (Continued)

- Eucalyptus Foundation  
General Operations in 2016 - 2018
- Faultline Foundation  
General Operations in 2011 - 2015
- Flora Family Foundation  
Haiti in 2013 - 2016  
Nepal in 2015
- Fondation Lombard Odier  
Haiti in 2010  
Philippines in 2014 - 2015
- Fondation Philanthropia  
Indonesia in 2012 - 2013  
Philippines in 2014 - 2015
- Give2Asia  
Indonesia in 2010  
China in 2011  
Philippines in 2015 - 2016
- Hilti Foundation  
Indonesia in 2011 - 2012  
Haiti in 2010 - 2016
- IDEP Foundation  
Indonesia in 2011
- The JTI Foundation  
Indonesia in 2015 - 2019  
Philippines 2017 - 2019
- Lombard Odier (Foundation 1796)  
Haiti in 2010
- Lawrence J. & Anne Rubenstein Foundation  
Philippines in 2014
- Mulago Foundation  
General Operations in 2010
- Rato Bengala Foundation  
Nepal 2016
- Schauble Family Foundation  
General Operations in 2014  
Nepal in 2015
- SM Cares  
Philippines 2016 - 2017
- Swiss Re Foundation  
Colombia in 2015 - 2016
- Thornton Tomasetti Foundation  
Indonesia in 2013 - 2014  
Indonesia in 2016
- Timken Foundation of Canton  
China in 2008

### Governments

- Bhutan Ministry of Works and Human Settlements  
Indonesia in 2013  
Philippines in 2016
- Caja de la Vivienda Popular  
Colombia in 2015 - 2016
- Colombia Servicio Nacional de Aprendizaje (SENA)  
Colombia in 2014 - 2015
- Haiti Ministry of Education and Vocational Training (MENFP)  
Haiti in 2017
- Haiti Ministry of Public Works, Transportation and Communication (MTPTC)  
Haiti in 2010 - 2013
- New Zealand Aid  
Indonesia in 2016 - 2017
- Republic of the Philippines Social Housing Finance Corporation (SHFC)  
Philippines in 2015
- Republic of the Philippines Technical Education and Skills Development Authority (TESDA)  
Philippines in 2015
- UCLBP  
Haiti in 2015 - 2018
- USAID  
Technical Development in 2012 - 2013  
Indonesia in 2013 - 2015

### Non-governmental organizations (NGOs)

- Haiti in 2015 - 2018
- AK Eine Welt  
Haiti in 2013
- American Red Cross  
Haiti in 2014 - 2016  
Nepal in 2016 - 2018
- Architecture for Humanity  
Haiti in 2011
- Bohol Shelter Cluster  
Philippines in 2013 - 2014
- CAFOD  
Haiti in 2011 - 2013
- CAMEJO  
Haiti in 2012
- CARE  
Indonesia in 2007  
Haiti in 2011 - 2015

## Clients and Partners (Continued)

### Non-governmental organizations (NGOs) (Continued)

- Caritas
  - Indonesia in 2011
  - Haiti in 2011, 2014
- Caritas Switzerland
  - Philippines in 2015 - 2016
- Catholic Relief Services
  - Indonesia in 2007
- Centre d'Étude et Coopération Internationale (CECI)
  - Haiti in 2013 - 2016
- Cordaid
  - Haiti in 2011 - 2013
  - Philippines in 2014 - 2015
- Echoing Green
  - China in 2008
- Entrepreneurs du Monde
  - Haiti in 2014 - 2016
- Food For The Poor
  - Haiti in 2014
- French Red Cross
  - Haiti in 2012 - 2014
- German Red Cross
  - Haiti in 2012 - 2013
- Global Communities (formerly CHF International)
  - Indonesia in 2010
  - Haiti in 2014 - 2016
- Global Giving Nepal Earthquake Relief Fund
  - Nepal in 2015 - 2016
- Habitat for Humanity
  - Haiti in 2010 - 2011
- Haiti School Project
  - Haiti in 2015
- International Organization for Migration (IOM)
  - Indonesia in 2007, 2017
  - Micronesia 2016
- Islamic Relief
  - Indonesia in 2011
- IDEO.org
  - Philippines 2016 - 2018
- J/P Haitian Relief Organization (J/P HRO)
  - Haiti in 2011 - 2014
- MASS Design Group, Inc.
  - Haiti in 2014
- Mercy Corps
  - Indonesia in 2005 - 2006, 2009 - 2010
  - Haiti in 2011
  - Guatemala in 2013
  - Nepal in 2015 - 2016
- Liechtenstein Red Cross
  - Haiti in 2011
- Oxfam International
  - Indonesia in 2010, 2017
- Panos Caribbean
  - Haiti in 2013
- Project Concern International (PCI)
  - Guatemala 2015 - 2016
- Reformation Hope
  - Haiti in 2013
- Salvation Army
  - Haiti in 2013 - 2015
- Save The Children
  - Haiti in 2010 - 2015
- Swiss Labour Assistance
  - Indonesia in 2011 - 2012
- SwissContact
  - Latin America in 2014
- Swiss Red Cross
  - Philippines 2017
- UNOPS
  - Haiti in 2011, 2014 - 2015
  - Nepal 2017
- World Renew
  - Nepal in 2016
- World Vision
  - Nepal in 2015 - 2017

## Awards



### 2017 Skoll Award for Social Entrepreneurship

The Skoll Foundation presents the Skoll Awards for Social Entrepreneurship each year to a select group of social entrepreneurs whose innovations have already had significant, proven impact on some of the world's most pressing problems, and invests directly in the promise of even greater impact at scale.



### 2011 Lemelson-MIT Award for Sustainability

The \$100,000 Lemelson-MIT Award for Sustainability is given to innovators creating sustainable solutions to the world's problems.



### 2009 Ashoka-Lemelson Fellowship

Ashoka is a global community of social entrepreneurs who deliver innovative solutions to social problems.



### 2016 Urban Resilience Challenge

Winner for proactive urban slum retrofitting in Manila, Philippines.



### 2014 Autodesk Tech Impact Award

The Autodesk Tech Impact Program donates software to non-profits that use design to solve epic challenges.



### 2008 Tech Award for Technology Benefiting Humanity in the Equality Category

2008 Katherine M. Swanson Foundation Equality Category Cash Prize Winner

The Tech Awards is a program of The Tech Museum of Innovation wherein innovators from any country are recognized for technological contributions which benefit the greatest number of people.



### 2013 SEAONC Award of Excellence in Structural Engineering for the

Seismic Evaluation and Retrofit Guidelines for Haitian Masonry Housing primer created with Degenkolb Engineers.



### 2006 SEAONC Award of Excellence in Structural Engineering

In partnership with volunteer structural engineering firms for house design for Aceh.



### 2013 SEAOC Award of Excellence: Study/Research/Guidelines for the

Seismic Evaluation and Retrofit Guidelines for Haitian Masonry Housing primer created with Degenkolb Engineers.



### 2006 Draper Richards Kaplan Foundation Fellowship

Draper Richards Kaplan invests in early-stage non-profit social enterprises with models for long-term change.



### 2011 Schwab Foundation US Social Entrepreneur of the Year

The Schwab Foundation for Social Entrepreneurship provides unparalleled platforms at the regional and global level to highlight and advance leading models of sustainable social innovation.



### 2004 Echoing Green Fellowship

Echoing Green identifies, invests in, and supports the world's most exceptional emerging leaders and the organizations they launch.



## Press

Build Change and its work have been featured by numerous media outlets across the world.

Notable recent press mentions include:



**A housing policy that could almost pay for itself? Think retrofitting**  
June 7, 2017  
Co-written by Elizabeth Hausler, this blog points to retrofitting as a viable housing policy for disaster resilience.



**6 ways to disaster-proof the world's most vulnerable**  
December 18, 2015  
Dr. Elizabeth Hausler Strand's blog featured on the World Economic Forum in conjunction with Schwab Foundation's Social Entrepreneurs program.



**Saving Lives Through Safer Buildings**  
March 4, 2017  
Our founding, mission, and where Build Change is going next is detailed in this article.



**This civil engineer is building houses to withstand earthquakes and hurricanes**  
July 3, 2015  
"I look at housing as a basic human right," Elizabeth Hausler Strand says in an interview with Grist.



**Build Change - A Homeowner Driven Approach to Rebuilding After Disaster**  
April 6, 2017  
Elizabeth Hausler was interviewed in this podcast after winning a Curry Stone Design Prize.



**How to Prevent More Deaths When the Earth Quakes**  
May 12, 2015  
Dr. Elizabeth Hausler Strand discusses the engineering behind earthquake-resistant building.



**Build Change receives \$1.25 million grant to retrofit homes in emerging nations before disaster strikes**  
March 27, 2017  
Build Change was featured for winning a 2017 Skoll Award for Social Entrepreneurship.



**How Impoverished Nepal Can Rebuild for the Next Earthquake**  
April 30, 2015  
Dr. Elizabeth Hausler Strand on opportunities to retrofit existing buildings in Nepal.



**Impact Journalism Day**  
June 25, 2016  
Build Change was featured in 8 newspapers from 8 different countries on Impact Journalism Day 2016.



**In Haiti, Rebuilding with Earthquake Resilience in Mind**  
December 4, 2014  
Noll Tufani, Country Director in Haiti, explains why Build Change focuses on retrofitting in Port-au-Prince.



**Por un hábitat seguro**  
June 6, 2016  
Juan Caballero was interviewed regarding the challenges faced and solutions implemented in our retrofitting program in Latin America.



**How the Private Sector Can Soften the Blow of Disasters**  
April 25, 2015  
Dr. Elizabeth Hausler Strand's blog on the impact of the private sector on disaster-resistant building featured on the World Economic Forum blog.



**Build Change: Worldwide Technical Excellence in Search of Local Solutions**  
February 1, 2016  
Build Change Engineer Jennifer Pazdon wrote this article regarding design challenges faced in emerging nations.



**Can a House Be Typhoon-Proof and Earthquake-Proof at the Same Time?**  
March 28, 2014  
Aurora Alemendral for The Rockefeller Foundation's 100 Resilient Cities blog.

## Press (Continued)



**The Rise of Social Enterprise**  
June 4, 2014  
Dr. Elizabeth Hausler Strand discusses Build Change and its emphasis on empowering women and encouraging women engineers.



**Building back better: Lessons from Aceh, Sichuan and Haiti**  
February 2, 2014  
Dr. Elizabeth Hausler Strand writes about building back better in post-disaster situations.



**What kind of philanthropist are you? A how-to for aligning your giving with your personal values**  
December 3, 2013  
Build Change noted as a nonprofit which is reinventing existing patterns to create long-term change.



**NPR's All Things Considered: How And Where Should We Rebuild After Natural Disasters?**  
November 18, 2013  
Build Change interviewed about reconstruction in post-disaster situations.



**Earthquakes are Inevitable. Disasters Don't Have to Be**  
April 23, 2013  
Dr. Elizabeth Hausler Strand's blog on disaster risk reduction featured on the Huffington Post website.



**Women Who Start: Why these entrepreneurs should be honored on International Women's Day**  
March 8, 2013  
Four women entrepreneurs impacting the world, including Dr. Elizabeth Hausler Strand.



**Build Change – Builds a Better Future in Seismic Zones**  
December 2012  
India-based civil engineering and architecture magazine features Build Change's homeowner-driven approach to post-disaster reconstruction.



**Haiti slowly being rebuilt by locals, charities**  
May 28, 2012  
Build Change response in Haiti featured in a news segment.



**When the favela falls over, you might build a better favela**  
April 16, 2012  
Bruce Sterling writes about Build Change's work in Indonesia.



**Colo. Nonprofit Helps Quake Victims Rebuild with Better Techniques**  
March 29, 2012  
Dr. Elizabeth Hausler Strand interviewed.



**Building Knowledge, Not Just Houses in the Developing World**  
November 23, 2011  
How Build Change is helping to build back better in Haiti by training local builders and engineers.



**9 for all Mankind**  
June 22, 2011  
Dr. Elizabeth Hausler Strand is a recipient of ELLE Magazine's 9 for All Mankind award.



**Social Entrepreneur and Build Change Founder Honored for Earthquake-Resistant Housing Innovation**  
May 10, 2011  
Dr. Elizabeth Hausler Strand wins the Lemelson-MIT Award for Sustainability.



**Grassroots Concrete**  
Winter 2010  
Build Change featured in the "What Works" section.



**Build Earthquake-Resistant Houses in Haiti**  
Fall 2010  
Dr. Elizabeth Hausler Strand on opportunities for homeowner-driven reconstruction in Haiti.



**Five Innovators Heading to CGI: An NGO Cementing Change**  
September 13, 2010  
Dr. Elizabeth Hausler Strand and Build Change's involvement with the Clinton Global Initiative.



**Managing Disasters with Small Steps**  
January 18, 2010  
Dr. Elizabeth Hausler Strand, following the 2010 Haiti earthquake.

## Success Story – Haiti



*Benisette and her family in front of their retrofitted home.*

**Benisette Pierre Louis**  
Homeowner

Port-au-Prince, Haiti

"After a very tiring day working at my beauty salon, which I've owned for 10 years, the ground shook and I woke up to a big surprise - part of my home was completely destroyed. Luckily, no one was inside. Within a matter of seconds, I lost everything," recalled Benisette Pierre Louis.

Living in a tent was crowded, unsanitary and unsafe. Benisette and her family decided to move back into their partially-collapsed house, despite the risk that it would continue to deteriorate.

Benisette's house was so severely damaged by the earthquake that it was red-tagged by the Haitian Ministry of Public Works, meaning it was considered unsalvageable and would be demolished. However, Benisette was adamant that she would not allow her house to be torn down. Build Change and Degenkolb Engineers decided to evaluate the potential to retrofit her home to be earthquake-safe.

After adding columns, a plinth beam and footing to the foundation, breaking down walls and adding new ones, and reinforcing doors and windows, the structure met standards for earthquake-resistance. The cost-effectiveness of the resulting retrofit encouraged Cordaid Haiti to consider expanding their program of retrofitting yellow-tagged houses to include some which were red-tagged.

Today, Benisette's home is safe. "Cordaid helped us to rebuild a major part of the house. If it wasn't for Build Change, I think that I would have used poor construction techniques," says Benisette.

"Cordaid enabled us to reinforce the house, and thanks to Build Change, I have a solid and safe house now."



## Success Story – Indonesia



*Erwin building a safe, sturdy wall for a new home in Indonesia.*

**Erwin Guaciano**  
Builder

Indonesia

Erwin Guaciano has been actively making a living as a builder for over 10 years. Unlike many builders in the area who don't have a formal background in construction, Erwin graduated from two universities in Lampung with a diploma in civil engineering. He is technically skilled in construction, both from college and experience.

There was, however, one thing missing from his university education: how to build earthquake-resistant houses. When he was training in the 1980s, earthquake-resistant construction training was not part of the curriculum. In most universities it still is not.

Build Change offered lessons in constructing houses that would withstand earthquakes and hurricanes, and Erwin said that he enjoyed each lesson so much he didn't want to miss any.

Since he attended Build Change's builder training course, he has already built five earthquake-resistant houses and plans to build many more. Twenty homeowners have approached him about building their houses.

*"I feel tremendous satisfaction I am able to build safe houses for people to live in."*

## Success Story – Philippines



*The Raloso family in front of their newly-completed home.*



*Eusi, hard at work building their new home.*

**Helen, Eusi, and Arian  
Raloso**  
Homeowners and  
Builder

Sulangan,  
Philippines

Helen, Eusi, and Arian Raloso's home in the small community of Sulangan in the Philippines was destroyed by Typhoon Haiyan in November of 2013.

Build Change partner Cordaid offered a grant to homeowners to rebuild their houses on the condition that they work with Build Change to ensure the house is disaster-resistant.

Eusi, a builder by trade, was part of Build Change's first training class in safer construction. He learned to build a house that can survive typhoons. "The techniques I learned from Build Change are better than the ones I was using," says Eusi.

Build Change hired him to train other local builders.

Eusi completed their home in October. Two months later, on December 8, 2014, Typhoon Hagupit struck.

They turned their new home into an informal evacuation center, welcoming the families of 17 of their neighbors into the safety of their house.

There were no casualties in Sulangan from Typhoon Hagupit, thanks partially to the Raloso family.





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