



## **WSSPC Awards in Excellence**

### ***2019 Nominations***

The Western States Seismic Policy Council (WSSPC) is pleased to announce it is accepting nominations for its 2019 Awards in Excellence. These annual awards honor exemplary programs, projects, and products that have significantly contributed to addressing earthquake risk reduction through new and creative approaches. Through these awards, WSSPC seeks to recognize the winners' demonstrated achievements in earthquake mitigation, preparedness, and response, and facilitate the transfer of those successful experiences to others.

Winners will be honored during the 2019 WSSPC Annual Meeting. Recipients will be presented with a specially-designed plaque at the WSSPC Awards Luncheon, and featured in press releases, meeting materials, and on the WSSPC website.

### **Eligibility**

During the award selection process, the following criteria are used to determine eligibility and rate the eligible nominations:

1. Is the nominated program, project or product operated, administered or sponsored by a government entity, non-profit organization or public-private partnership?
2. Has the program, project or product been operational for at least one year prior to the nomination date?
3. Does it address a significant earthquake risk reduction issue that is local, regional, state or national in scope?
4. Does it represent a new and creative approach to the earthquake risk reduction issue?
5. Has the nominated program, project or product effectively achieved its stated purpose, goals and objectives?
6. Could the program, project or product and/or its results be easily transferred for use to another local, state or regional government or non-profit organization?

### **Nominations**

Anyone from outside of the nominated program, project or product may submit a nomination, whether or not they are a member of WSSPC. To make a nomination, complete all of the information on the attached form and submit it with the supporting documents to [info@wsspc.org](mailto:info@wsspc.org) by Friday, January 4, 2019. For questions or additional information, please contact WSSPC at 916-444-6816 or go to [www.wsspc.org](http://www.wsspc.org).

### **Winners**

Winners are chosen by the WSSPC Board of Directors. 2019 Award in Excellence selections – and their nominators – will be notified at the end of January 2019. Winners' notification forms will be posted on the WSSPC website.

Attachment: 2019 WSSPC Awards in Excellence Nomination Form

## WSSPC Awards in Excellence

### *2019 Nomination Form*

**Nominated Program, Project or Product:**

Program, Project or Product Name: Fix the Bricks		
Nominated Administering Organization: Salt Lake City Emergency Management/Utah Division of Emergency Management		
Contact Name/Title: Audrey Pierce, Critical Infrastructure Liaison/Brad Bartholomew, Mitigation and Recovery Section Manager		
Street: 475 S 300 E		
City: Salt Lake City	State: UT	Zip: 84044
Telephone: 801-799-3603	Fax:	
Email: Audrey.pierce@slcgov.com		

**Nominating Individual or Group (must be nominated by someone outside the nominated organization)**

Nominating Individual or Group: Leon Berrett, Chair – Utah Seismic Safety Commission		
Agency Affiliation: Utah Department of Public Safety, Division of Emergency Management		
Street: 1110 State Office Building		
City: Salt Lake City	State: UT	Zip: 84117
Telephone: 385-468-6129	Fax:	
Email: lberrett@slco.org		

**Award Category (check all that apply):**

<input checked="" type="checkbox"/>	Educational Outreach (choose all that apply from the following 3 sub-categories)	<input type="checkbox"/>	Multi-jurisdictional Planning
<input checked="" type="checkbox"/>	Outreach to Business/Government	<input checked="" type="checkbox"/>	Mitigation Efforts ( <b>Primary Focus</b> )
<input checked="" type="checkbox"/>	Outreach to General Public	<input type="checkbox"/>	Non-Profit Agency Efforts
<input checked="" type="checkbox"/>	Outreach to Schools	<input type="checkbox"/>	Research Projects
<input type="checkbox"/>	Innovations	<input type="checkbox"/>	Response Plans/ Materials
<input type="checkbox"/>	Legislation	<input type="checkbox"/>	Use of New Technology

**Evaluation of Program, Project or Product (use as much space below each question as needed)**

- How long has the nominated program, project or product been operational?  
 (Note: to be considered for an award, it must have been operational at least one year prior to nomination.)  
 Since: Month Jan Year 2016

Fix the Bricks started as a steering committee in 2014. The committee was focused on educating the public about earthquake risk associated with Unreinforced Masonry (URM) buildings and looking for ways to get more people to implement seismic improvements. Then in 2015 a possible way to help homeowners pay for the improvements was brought to our attention, however, the funding source had never been used in the way we were proposing before. In **2016** with support from FEMA, State of Utah, and members of the steering committee Salt Lake City ventured down the road of using Pre-Disaster Mitigation funds to complete seismic retrofits to “at risk” single family dwellings in the community. In 2016 SLC Emergency Management partnered with SLC Housing and Neighborhood Development (HAND) to initiate a beta project. One of HAND’s project homes that fit our criteria as a URM was selected to get specific seismic improvements paid for by the City. The work performed on the beta home was then used to develop a cost formula to estimate construction costs for the grant application. We decided to keep the first year application manageable with 44 homes because we had to develop the processes and build the program foundation as we went along through different phases. We were awarded the funding through a competitive process at the State and Federal level; we learned a lot and made some changes along the way. Currently the first year grant is ahead of schedule and should be completed prior to the end of the grant performance period. In 2017 we were awarded a second year of funding at \$1.9 Million and doubled the number of selected participants to 100 plus alternates. In December 2018 we applied for \$4.0 million, 234 homes plus alternates (award announcement will come in 2019). We consider 2016 to be the year Fix the Bricks became operational as a program.

2. What is the major purpose of the program, project, or product? What problem or issue was it designed to address?

Salt Lake City’s Fix the Bricks is a life safety program focused on mitigating the collapse risk of unreinforced masonry buildings. There are 31,892 residential URM’s in Salt Lake City which pose a significant threat to residents during an earthquake. URMs are expected to account for 90% of the 7,400 – 9,000 serious injuries and 2,000 – 2,500 deaths when an earthquake occurs along the Wasatch Fault. Fix the Bricks plans to reduce the number of deaths, injured and trapped after the earthquake by facilitating seismic improvements for its residents.

3. Describe the specific activities and operations of the program, project, or product.

Program staff have various activities related to their authorities as they process applications, manage project funding, facilitate construction to approved properties, and coordinate with project partners. The full time City employee functions as the Fix the Bricks Program Manager making decisions about overall development of the program and system tools, policies and procedures, grant management, marketing of the program, educational outreach, professional trainings, and handling any of the projects that become complicated or out of the norm. The grant funded employee handles most of the day to day operations, customer service, data management, project statuses, coordination with the contractors for construction documentation, and preparing reimbursement packets for closeout.

The following is essentially what participant’s experience:

- Homeowners apply to participate in the program.
- When we have openings;
  - Participants off the waiting list are scheduled to come in for a meeting to cover participation expectations and program guidelines.

- During this meeting, the participants sign a checklist acknowledging their roles and responsibilities.
- A home inspection is performed by an engineer.
  - The engineer decides if it qualifies for the program.
  - If it does, the engineer writes a scope of work (SOW) stating Fix the Bricks approved seismic details.
- An initial cost is estimated based on a pre-approved formula and findings from the SOW.
- A cost benefit analysis is completed along with a preliminary historic review and mapping to determine if the home is in a flood zone or within a historic boundary.
- If approved the homeowner gets bids and selects a contractor.
- The bid is submitted to Fix the Bricks staff for review to ensure it fits within our guidelines, scope, and cost estimation.
- If the bid is accepted, a contract between the City and the homeowner is drafted and a completion date is determined.
- After the contract is signed by all parties and recorded by the City, the homeowners can schedule their construction.
- After construction is complete several documents and proof of work are submitted to Fix the Bricks staff for review.
- There is a final closeout meeting where a check for the program share of the construction is issued.

4. What new and creative approach or method does the program, project, or product use to address an issue or problem?

Our approach is financial incentive from federal mitigation grant dollars to motivate homeowners to complete seismic improvements to their dwellings. For many years, Salt Lake City Emergency Management has been educating the public about earthquake risk and what they can do to prepare. However, the cost was a significant barrier for homeowners. One of the first Fix the Bricks educational campaigns was an interactive kiosk where homeowners apply for building permits. The kiosk showed where their home was on a colored coded map representing its possibility for collapse and asked a series of questions that would score their need to consider seismic improvements. The objective was to show homeowners the benefits of doing seismic upgrades while they were already doing construction on their homes. Although people seemed intrigued by the information it didn't seem to get anyone to add the work to their projects. Then we held a Mayor's press conference to officially launch Fix the Bricks and request participation for the initial grant application. Within 24 hours of the Mayor's endorsement of the program and the information we shared at the press conference, we had over 600 applications and they kept coming. To date over 1800 people have applied to participate in our program. Offering financial incentive has got people actively working toward mitigating effects and planning for earthquakes on a level we have not seen in the City previously. Salt Lake City Emergency Management still continues to educate the public but due to Fix the Bricks it has added contractor training to its outreach efforts. Engineers, contractors, and roofers can act as the professional source of education to homeowners looking to work on their homes and offer recommendations for adding seismic improvements to their construction plans.

5. What was the start-up budget and source(s) of funding?

Budget: \$ 600,000 Source: 75 % FEMA PDM Grant and 25% SLC Corp

6. What are the annual operational costs and source(s) of funding?

Budget: \$120,000 Administrative and \$880,000 Construction  
Source: 75 % FEMA PDM, 25% SLC Corp and Homeowners

7. How many employees (full-time equivalent) work(ed) with the program or project, or on the product?

1 full time City employee and 1 full time grant funded employee. By Feb 2019 will bring on an additional full time grant funded employee.

During different phases of the program some specialized work is performed by other City employees or vendors paid for their services.

8. Where did this program, project or product idea originate?

Originated within the nominated organization

Adapted from another source

- Original source: \_\_\_\_\_
- How was it modified?

9. Has the program been fully implemented?  Yes  No

10. If the program has not been fully implemented, what actions remain to be taken?

Yes all the phases of the program processes are fully implemented and operational (application, historic review, contracts, construction, and reimbursement). However we are still adapting as we learn from our experiences or find a need to add policies.

11. Is there evidence that the program has been effective in achieving its stated purpose? Briefly summarize evaluations (pro and con) of how well the program has addressed the defined problem or issue.

Aside from evaluating how these homes hold up after an earthquake we have limited measurement of how effective the completed work will be. The science behind the finished seismic retrofits tells us we have improved the structural integrity of the dwellings and diminished the probability of collapse.

The number of homes getting seismically retrofitted is growing due to the popularity of the program and the educational awareness that goes along with it. This statement can be validated in several ways:

- First and foremost, the number of homes getting retrofitted through the Fix the Bricks program is increasing as the program expands, as well as the number of interested participants submitting applications.
- Second, some Fix the Bricks participants seismically improve their homes beyond program approved retrofits. Fix the Bricks only funds specific details but the homeowners can have any work they want performed during the project at their own cost.
- Third, encouragingly, even people not funded by the program are getting the work done. Some are applicants from our waiting list that have the means to complete the work

without assistance and others are outside of our jurisdiction that move ahead even though they don't qualify for our program.

- Fourth, we've received multiple inquiries from other jurisdictions and other States about implementing Fix the Bricks in their area.
- Last, but not least, increased demand of some specific materials used for the seismic improvements has a manufacturer considering placement of products in local supply chains. Currently, the materials have to be bought in bulk then shipped to Utah.

12. What limitations or obstacles were encountered? How were they overcome?

Grant cycles complicate the process causing extreme high volume workloads followed by long wait periods. These cycle time frames impact the homeowners, the contractors and the engineers involved in the program. Consistent funding resolves the issue allowing work load to be spread out through the whole year. Having overlapping grants gives us the ability to have participants in different phases of the process with consistent work for the vendors.

Selection of qualified contractors has also been a little tricky. The City has to be very careful not to show any favoritism to vendors or to appear like we are promoting any particular contractors. It is the responsibility of homeowners to get bids and select a contractor to perform the construction. Fix the Bricks participants and others constantly ask us for contractor referrals which we can not give them. There are very qualified contractors out there but how do we get them matched up with homeowners without showing favoritism. We approached this from multiple angles. Fix the Bricks has given contractors that we've worked with permission to use our logo on their webpages and social media to market themselves to Fix the Bricks participants or anyone else looking for this type of construction. We try to direct participants to places they might find information about qualified contractors. For example we will tell them to google Fix the Bricks so that they will see links to contractor's websites with our logo. We also have a link on our website that brings up the historic preservation list of contractors some of which have worked on our projects. But the creative approach that has helped us the most required some special permission from the City's legal team and participants. We keep a list of contractors that have worked on our projects, during the homeowners initial meeting we request permission to share their contact information with contractors, then after we have five or so homes that need bids we send each contractor a list of participants, it's up to the contractors to reach out to the homeowners and as long as we send the same email to each contractor they essentially all have the same opportunity to bid on those projects.

13. Additional information for the WSSPC Board to consider in evaluating the program, project or product. Supporting documentation, samples, or other items may be attached.

The URM issue is not confined within Salt Lake City boundaries. It's along the entire Wasatch front, in neighboring jurisdictions, and even in other states with similar earthquake risks. For that reason, the goal was always to expand the program and create a repeatable process. The core pieces of the program can be adopted by other jurisdictions with some minor adjustments to how they operate. We have offered to share our lessons learned and to even participate in the program development as it's expanded. One unique thing we have offered other jurisdiction during our expansion meetings is a list of interested participants. Under the current structure of the program funding participants have to live in Salt Lake City boundaries. When we come across applicants that are disqualified based on the boundary we still maintain their application information so it can be shared with their jurisdiction. Another program expansion goal has been to move beyond single family dwellings and address multi-family housing units. These buildings

would have to be managed differently because of some complicating factors. We intend to eventually work toward this long term goal but don't have a timeframe at this point.

The Utah Guide for the Seismic Improvement of Unreinforced Masonry Dwellings Second Edition is a key piece of the Fix the Bricks program. Early on in the development of Fix the Bricks we knew that the engineering details outlined in the book was an excellent guide and tool that would be regularly referenced as part participants SOW's. We also knew that based on FEMA guidelines any property more then 50 years old would have to be treated as potentially historic. Before we even started processing application we asked the State Historic Preservation to review the guide and provide us with a list of details that could be historically approvable and which things we should avoid. This information was then formalized into a programmatic agreement and was adopted by the local historic landmark commission. The guide has truly been a signification resource and asset to the program. Interestingly, as homes have been evaluated for our program, some new engineering details have been adapted that can be used in later updates to the guide.

The professional contractor training we provide has been approved by DOPL so attendees can get continuing education credit for participation.

We continue to partner with Housing and Neighborhood Development on projects. If participants express a financial concern about getting the work or covering their share of the cost we refer them to HAND to see if they qualify for their programs. It is acceptable by FEMA to use the PDM funds in conjunction with HAND funds to complete a project.

We owe a great deal of gratitude to FEMA and the State Division of Emergency Management for their support of our program and their guidance during the development and implementation.

Submit the nomination form and all supporting documents to Program Manager Erin Mommsen at [info@wsspc.org](mailto:info@wsspc.org) . Documentation that cannot be sent electronically may be mailed to: WSSPC, 801 K Street, Suite 1236, Sacramento, CA 95814. If you have any questions, please feel free to contact us at 916-444-6816. **Deadline is Friday, January 4, 2018.**