

## Visioning Next Steps for the Resilient Neighbors Network (RNN)

A DRAFT for Consideration Version 3

Ed Thomas June 23, 2014

We will be meeting June 27<sup>th</sup> to discuss the formulation of next steps for carrying out the portion of the FEMA NHMA-CTP grant to support the Resilient Neighbors Network (RNN) effort to promote hazard mitigation and climate adaptation through supporting Peer-to-Peer networking.

Karen Helbrecht, the FEMA Manager for the FEMA funding which is the primary support of this effort, and I had a chat yesterday. In that conversation, Karen confirmed my understanding that FEMA desires NHMA to come back to them with suggestions as to how best to achieve our objective of encouraging, education and promoting Peer-to-Peer efforts to promote safe development/hazard mitigation/climate adaptation into discussions of community development/resilience/adaptation. Specifically, FEMA desires NHMA to come back to FEMA with how RNN can help interject a hazard mitigation/ safe development and redevelopment message into the national resilience conversations. She would particularly like to hear from us as to what FEMA should suggest be included in a resilience definition. She would like us to consider developing a checklist of hazard mitigation/climate adaptation actions which should be considered in the development of a resilience definition and scope of local resilience activities to be undertaken. She very much agrees that it is a whole new world full of opportunities for hazard mitigation if we can get our message inserted. (See below for further information on this new world of opportunities)

This morning Karen transmitted a document sent to her by Roy, which she suggests is on point for our discussion. Roy described the document, *Disaster Sensitive Risk Investments*, as “... a very interesting multi-sector approach to resilience coordinated by the UN Office for Disaster Risk Reduction.” That document is available on line at: [www.theriseinitiative.org](http://www.theriseinitiative.org)

I will also try to send our June 27<sup>th</sup> Meeting attendees a copy.

Karen will be in transit to London for a speaking engagement on Friday, but will plan to be able to call in to our meeting at about 8:15 AM Colorado time if we give her a call in number. I have alerted Marianne to our end for a call in number and she is on the hunt.

Several years ago, when we conceived and developed the concept of the Resilient Neighbors Network, a peer-to-peer effort to support resilience at the local level, the landscape of resilience was very different than it is today. [Much more information on RNN is located at: <http://nhma.info/projects/resilient-neighbors/>] When we developed the RNN concept very few organizations and groups were involved in resilience, or climate adaptation. Today there are well over 100 organizations and groups involved in what they describe as resilience. See, e.g. The Updated OARS (Organizations Addressing Resilience and Sustainability) Shortlist, created by Don Watson, FAIA, located at: <http://nhma.info/the-updated-oars-organizations-addressing-resilience-and-sustainability-shortlist-created-by-don-watson/>

Recently, I have attended four major conferences at which climate adaptation, resilience, and sustainability have been major themes. Those conferences were:

- a) the EPA funded Northeast Climate Change Preparedness Conference [more information at: <http://www.antiochne.edu/innovation/climate-change-preparedness/agenda/>];
- b) the Lincoln Institute of Land Policy 9th annual Land Policy Conference [further information at: <http://www.lincolninst.edu/news-events/news-listing/articletype/articleview/articleid/2314/education-land-and-location-and-9th-annual-land-policy-conference-announced>
- c) the Kresge Foundation and Garrison Institute sponsored Climate Adaptation Service Provider Practitioner *Workshop Mapping the Local and Regional Climate Adaptation Resource and Service Landscape* [ further including the list of participants, agenda and follow-up materials is not on line at present, but I would be happy to send it on request.
- d) the MIT Sea Grant Climate change symposium: Sustaining Coastal Cities. [Further information on Recovery diva Blog at: <http://recoverydiva.com/2014/06/21/results-of-climate-change-symposium/> and also at the symposium web site: <http://seagrant.mit.edu/conferences/CCS2014/>

The MIT Sea Grant Conference was especially fascinating on many levels. To me, the most positive aspect of the entire Symposium was hearing from a City Councilor and City Planner from Chelsea, MA, and others about climate adaptation and the poor and otherwise disadvantaged. The City of Chelsea is extremely poor and recently out of state receivership [first in MA since the Great Depression of the 30's]. Chelsea is a coastal city whose residents really cannot take advantage of coastal amenities because of industrial uses on the waterfront, yet the City desperately needs development for tax revenues for its underfunded schools [120 different languages spoken in the school system!] and is concerned that this sea level rise discussion may induce developers to move elsewhere. New FEMA flood maps which show extensive areas of their developable and developed land as Special Flood Hazard Area were a

shock to them. Kudos to the organizers: this is the first time I have attended a Climate Change Conference where environmental justice, need for tax revenues and serious problems for underprivileged people were discussed clearly and openly. One presentation concerned the development of a vulnerability index for coastal areas; another mentioned the issues about the elderly with pets [I would have added those needing service animals; as well as the problems associated with leaving behind domesticated animals] during evacuations. That index produced very clear indication that we have many vulnerable people in coastal areas; the coast is not just a rich person's playground. Another presentation focused, in part, on the problems which will be faced by the elderly and mobility impaired who live in high-rise or elevated homes when the power goes out in a storm or whatever. This event coupled with the recent release of information on the extreme problems which will be faced by inland poor in Vermont due to climate change gives me hope that we can really get some attention to the wildly disproportionate impact disasters can have on economically, physically and socially disadvantaged/challenged people & I hope threatened & endangered species and domesticated animals too.

All the presentations are, or shortly will be available on the Conference website. My abstract and PowerPoint is available on request.

The energy, passion, and commitment of the participants at these events were enormous. Yet, these four events are but a sample of the enormous amount of activity which is taking place around the United States and throughout the world on the subject of climate adaptation and resilience.

At these events, I have had the pleasure and honor of both introducing a whole new group of folks to NHMA, and our mission as well as getting to know about multiple local folks and national organizations which are working on incredible resilience efforts at the local level.

A short sampling of those people and efforts include:

- A) **The City of Baltimore.** At both the Kresge Foundation/Garrison Institute meeting and the Northeast Climate Change Conference I was able to listen to splendid presentations by: Kristin Baja, the Hazard Mitigation Planner for the City of Baltimore Office of

Sustainability. Her e-mail is [kristin.baja@baltimorecity.gov](mailto:kristin.baja@baltimorecity.gov) The Baltimore program is inspirational; Kristin is one of the best speakers I have ever heard.

Baltimore Program info: <http://www.baltimoresustainability.org/>

B) **Southeast Florida Regional Climate Change Compact.** At the Kresge Foundation/Garrison Institute meeting, I met Jennifer L. Jurado, Ph.D., Director, Environmental Planning and Community Resilience Division, Broward County who spoke eloquently about the multi county climate change resilience effort in four of Florida's most flood prone counties: Broward, Miami-Dade, Palm Beach and Monroe [The Florida Keys]. In addition to reviewing the overall adaptation and resilience efforts in Broward County and south Florida Dr. Jurado discussed their plans to convene experts for a multi-day session focused on developing resilient design strategies on August 11-13, 2014 around several archetypical settings – an event which we are dubbing “South Florida Resilient Redesign.” At this this time they have commitments to participate from several individuals from the UK, Netherlands, University of Miami, Florida Atlantic University as well as several architectural firms.

As a follow-up to our discussions, she has asked that both Don Watson and I become involved as resource persons. She has requested that I also identify additional resource persons who may be able to help their efforts. I would like to involve additional folks from NHMA, especially one or more RNN Communities. [**Gene Henry, what do you think?**]

Program information: <http://southeastfloridaclimatecompact.org/>

In addition, I have been asked by the Kresge Foundation to be one of the 14 or 15 “Thought Leaders” from around the Nation on their Project Advisory Committee for their “Community-based Adaptation in the United States: A Critical Assessment” Project. The first meeting of the Project Advisory Committee is scheduled for next month in Detroit. The members of the Project Advisory Committee include Jim Schwab from APA, Julie Rochman from IBHS, Vicki Arroyo from the Georgetown Climate Change Center as well as a representative of the NAACP. I very much hope to represent NHMA and inculcate the NHMA message into this project. Further information about the Kresge Foundation is at: <http://kresge.org/>

Generally speaking, the organizations and groups who were working on resilience, come at the topic from a water quality, climate change and/or environmental perspective. Generally speaking, these groups have little experience with natural hazard mitigation, floodplain management, disaster relief, or land-use and building codes designed to reduce the ever mounting toll caused by improper and unsafe development in areas subject to foreseeable natural hazard. Bring the NHMA message and expertise into these discussions seems to me like a fabulous opportunity for those of us who care about a safe and resilient future.

As we consider how best to build upon the concept of a peer-to-peer network designed to encourage and promote local efforts to build a safer more resilient future for our nation, I suggest that we consider carefully how best to leverage our limited resources in such a way to take advantage of the opportunities presented by the enormous energies being channeled into climate change adaptation.

**At the same time, I would strike a cautionary note that the efforts of the Natural Hazard Mitigation Association not become identified with the highly partisan political issues which have developed around the topic of "climate change." I believe that fundamentally we need to be concerned about behavior change at the federal, state, local, business & industry, and individual level. We need to include climate change skeptics and "deniers" in the "Whole Community" involved in the tremendous changes needed in how we do community development, construction, design, construction, as well as insurance and payments for damages in areas subject to foreseeable natural events. We need to negotiate & sell major change in the unnecessarily awful way we, as a society, are developing our communities. Protecting the public and the economy is not a political issue. Public Safety is a fundamental responsibility of government in which all of us as people, have an important role. Promoting a safe development/do no harm principal is fundamental to morality, ethics and the law.**

As I understand the matter, the RNN concept was significantly based upon both the successes of the Project Impact and the really excellent paper written in 2012 by Juliette Hayes, *The Mitigation Model: A Path Toward Resilience*, available online at:

[http://nhma.info/uploads/DRC\\_committee/The\\_Mitigation\\_Model\\_final\\_draft\\_03-02-12.pdf](http://nhma.info/uploads/DRC_committee/The_Mitigation_Model_final_draft_03-02-12.pdf)

Project Impact as a program lasted only from 1997 to 2001, but its effects have continued in many positive ways, See, e.g., Eric Holdeman & Ann Patton, "Project Impact Initiative to Create

Disaster-Resistant Communities Demonstrates Worth in Kansas Years Later”, in *Emergency Management*, December 12, 2008, located at:

<http://www.emergencymgmt.com/disaster/Project-Impact-Initiative-to.html>

In a comment on an earlier version of this paper, Tim Lovell of Tulsa Partners, one of the consultants to NHMA on the development of RNN indicated that he considered suggesting the following addition to the paper:

*“Your visioning document provides the groundwork necessary about changes in the landscape of resilience over the past year to be considered. There was really only one comment on the visioning document, which I ultimately decided was not worth mentioning. It was where you said, “As I understand the matter, the RNN concept was significantly based upon both the successes of the Project Impact and the really excellent paper written in 2012 by Juliette Hayes, The Mitigation Model: A Path Toward Resilience...” I normally say that the RNN concept came from two sources, the FIMA Mitigation Model work which was represented by the Juliette Hays document you cite, and from 2011 NHMA Practitioners Workshop (it wasn't called symposium yet) session/track on fostering Disaster Resilient Communities, which included people like Dennis Mileti, Kathleen Tierney, Margaret Davidson, Shirley Laska, Ann Patton and others and was moderated by Bill Hooke and me. I usually do this to show that the RNN concept was co-germinated by both NHMA and FEMA .*

Tim continues:

*“The fact of the matter is ,though, that your statement is accurate, as is shown in the proceedings from that meeting...*

*“The group consensus was that NHMA should to support FEMA’s Risk MAP program, see how it can be adapted to support Project-Impact style community resilience projects, and bring together a caucus of groups to work on the program in a Resilient Communities Coalition.*

*Tim Lovell summarized the consensus to include three recommendations for NHMA:*

*Partner with FEMA and Risk Map, plus other agencies and foundations, etc., to try to move ahead with a Project-Impact-style resilience project and disaster-resilience centers.*

*Work with academic partners such as the Natural Hazards Center on cataloguing information, working in collaboration with others who do research well.*

*Increase our number of partnerships and create a network of multi-interest entities who would work on fostering disaster-resilient communities. NHMA would partner with them to create a Resilient Communities Coalition.”*

Tim concluded his observations by adding: “I decided this history lesson was not necessary to add to the vision document, and that it sufficed to reference, as you did Ed, the Mitigation Model and Project Impact as the antecedents of RNN. That was really my only comment on the vision document.”

However, out of respect for Tim and his valuable contributions to NHMA as well as the RNN Project [and maybe because I was a History Major in College] I added his history lesson.

The value of peer-to-peer networking has been demonstrated time and time again; to the point that it really seems to me that it is indisputable. The Natural Hazard Mitigation Association has developed both the RNN concept as well as the Peer-to-Peer consultations described in appendix B of this paper.

The focus of this memo is on helping us all vision a successful outcome of the June 27<sup>th</sup> NHMA CTP discussion on proposed next steps for the RNN concept.

The statement of work (SOW) for the NHMA CTP Agreement (full SOW included as Appendix A) for 2013-2014 states in the part most relevant to our June 27<sup>th</sup> Meeting:

*“Task 4c -- Plan workshop and outcomes. In collaboration with FEMA, NHMA will facilitate a discussion among selected community representatives and national experts to develop detailed workshop plans and desired outcomes. Identify agenda, participants, discussion goals, workshop deliverables, and specific questions to be posed by FEMA for network feedback. (April 2014-June 2014)*

*Task 4d – Conduct an RNN workshop at a central location, such as the 2014 International Hazard Mitigation Practitioners Symposium. NHMA proposes to invite community representatives and advisors to a face-to-face workshop/meeting at the 2014 annual International Hazard-Mitigation Practitioners Symposium. Discussion items will include specific ways to encourage and empower communities to become disaster resilient, to improve*

network communication and collaboration tools, and to expand the network to include additional participants and communities. (June 2014)

*Task 4e – Document findings.* Document lessons shared. (July 2014)

*Outcomes:* Agendas and minutes, including contact database for participants and partners. Summary proceedings, as well as more detailed verbal and (if available) video reports.”

I believe that our task on June 27<sup>th</sup> is fairly clear based on the SOW.

As we carry out our tasks of finding “specific ways to encourage and empower communities to become disaster resilient, to improve network communication and collaboration tools, and to expand the network to include additional participants and communities”, I believe that we need to carefully consider the enormous changes in the world of Resilience in the past few years, particularly since the time President Obama issued Executive Order 13653. That EO directs U.S. federal agencies to take steps that will make it easier for American communities to strengthen their resilience to extreme weather and to prepare for other impacts of climate change. Many federal agencies are embarking on ambitious programs to facilitate local efforts to take action to promote climate adaptation. I suggest that we seek to vision options as to how best to leverage the enormous knowledge base of the members of NHMA into those ongoing efforts of foundations, agencies and citizens.

As always, comments, thoughts and ideas are most welcome!!

Ed Thomas

June 6, 2014

*In loving memory of the great sacrifices of the Great Generation who began the liberation of Europe on this day 70 years ago.*

And July 21-21 &23, 2014

## **Appendix A**

# NHMA's Cooperative Technical Partnership Proposal:

## Scope of Work

### Summary

This document describes work to be performed by the Natural Hazard Mitigation Association (NHMA) during the second phase of a program known as Resilient Neighbors Network (RNN). The RNN program is being developed through a cooperating technical partnership between FEMA and NHMA.

This scope of work is focused on two primary areas: RNN and other related activities. The scope includes background information on the program's need and purpose, describes the RNN network as developed to date, summarizes work performed during phase 1, outlines the RNN framework plan for phase 2, and sets out the phase 2 tasks, deliverables, and budget. It also includes other activities under the umbrella of peer community dialogue on mitigation activities, which build on an original goal of NHMA and RNN to provide FEMA with local feedback on national mitigation policy. This includes a special research project on residential safe rooms in one local area impacted by tornadoes.

### Need/Purpose for Resilient Neighbors Network

It has long been recognized that hazard mitigation is, first and foremost, local. Experience has shown that the best public policy, in the field of hazard mitigation, is born in local laboratories, at the intersection of technical experts and the entire "Whole Community" of officials, businesses, developers, industry, and grassroots citizens.

But across jurisdictions, transmission of these lessons learned is typically slow and serendipitous. A number of innovations are taking place in local communities around the nation, but these communities need to be connected in a systematic way so they can learn from each other, with assistance from technical experts, and effectively spread the "best practices that can change cultures and transform hazard mitigation.

The goal of the Federal Insurance and Mitigation Administration's (FIMA) Mitigation Model ("the Model") is to increase community resilience to natural hazards by establishing mechanisms and incentives to facilitate and enable local risk reduction actions. A critical component of the Model is to assist with the development of collaborative information sharing and mentoring programs to support increased and effective risk reduction actions. 2

Essential then, is the creation of a functional network by which “bottom up” innovation seek support from top level decision makers to overcome impediments while at the same time connecting communities so they may learn from each other. To address these needs and to help FEMA develop and implement the Model, the Natural Hazard Mitigation Association is facilitating a two-tier network among communities working to become disaster-resilient. This network provides feedback, communication, and strategic recommendations related to the Model, with developing processes and mechanisms to deliver the vision in the long term. Through collaboration and partnership, this network can transform how hazard mitigation is valued and implemented to best foster disaster-resilient, sustainable communities.

The proposed two-tier network includes:

☐ A *resilient community action network*, named Resilient Neighbors Network, that is a peer-to-peer collaboration linking communities who are working on mitigation and resilience, and

☐ A separate but related initiative is the *Advisory Team*, a distinguished advisory and mentoring collaborative that brings together the leading national experts in this field in support of the communities.

These groups are working together to offer ideas for the Model, while they are also working together to strengthen and expand local hazard-mitigation programs. A goal for the network of mutually mentoring communities is to draw out ground truth from grassroots practitioners. This group can review, respond, and recommend, from the standpoint of their seasoned on-the-ground expertise and experience. They can help create a widely-dispersed network of peer-to-peer sharing that can also communicate difficulties, impediments and successes to top-level decision makers. Thus, the network has multiple functions in promoting resilience and hazard mitigation: to share information, identify issues and highlight success stories; to serve as a vehicle for mutual mentoring that can inspire and inform communities; and to provide grassroots feedback and instruction that can enlighten and inform policy.

### **Resilient Neighbors Network**

*Ten charter communities.* During phase 1, NHMA convened and facilitated discussions among representatives of ten communities who are working to become resilient. Some of these communities are former FEMA Project Impact communities and embrace mitigation as a community value. All have unique experiences and expertise they are sharing to help

refine, develop, and implement the network. These communities are working on livability, sustainability, hazard mitigation, disaster recovery, resilience, planning, and related issues. They have much to share with each other, the nation, and the world.

The ten pilot communities comprise an *RNN Steering Committee* that is developing the peer-to-peer sharing network while they are helping to inform, challenge, and inspire each other. Each community has a designated representative and one or more alternates. They hold monthly conference calls and interact in a variety of other ways across the miles.

The ten communities are:

- ☒ Augusta, Georgia
- ☒ Charlotte-Mecklenburg County, North Carolina
- ☒ Grays Harbor County, Washington
- ☒ Hillsborough County, Florida
- ☒ Jefferson County, West Virginia
- ☒ Pasadena, Texas
- ☒ Rockford, Illinois
- ☒ Central Shenandoah Valley, Virginia
- ☒ Tulsa, Oklahoma
- ☒ State of Vermont

*Advisory Team.* The Advisory Team includes many of the nation's top-level experts in the field of hazard mitigation, with representation from academia, government, and local practitioners. It has been built on the existing NHMA Advisory Committee. The group works in coordination with existing institutions such as the Natural Hazards Center in Boulder. The members of the team include the following:

- ☒ Bill Becker

Affiliation: Natural Capital Solutions

Areas of Expertise: hazard mitigation, sustainability, energy conservation

- ☒ Bill Hooke

Affiliation: American Meteorological Society

Areas of Expertise: meteorological policy and practice

- ☒ Bob Freitag

Affiliation: University of Washington

Areas of Expertise: hazard mitigation and floodplain management

☐ Cynthia Palmer

Affiliation: Federal Emergency Management Agency

Areas of Expertise: federal policy and local practice, hazard management 4

☒ Ed Thomas

Affiliation: Natural Hazard Mitigation Association

Areas of Expertise: law, floodplain management and hazard mitigation

☒ Dennis Mileti

Affiliation: Colorado University

Areas of Expertise: risk communication and hazard management

☒ Dick Krajewski

Affiliation: Natural Hazard Mitigation Association

Areas of Expertise: community organizing, developing social resource mapping and networking, adoption of innovations, participatory action research and problem-solving, adult and community education, volunteer management.

☒ Elaine Enarson

Affiliation: Independent Scholar

Areas of Expertise: gender issues in disaster risk reduction

☒ French Wetmore

Affiliation: French & Associates

Areas of Expertise: floodplain management, Community Rating System, mitigation planning, floodproofing, public information programs

☒ Gavin Smith

Affiliation: University of North Carolina, Center for the Study of Natural Hazards & Disasters

Areas of Expertise: hazard mitigation planning

☒ Jane Kushma

Affiliation: Jacksonville State University

Areas of Expertise: emergency management

☒ Jessica Ludy

Affiliation: UC Berkeley

Areas of Expertise: floodplain management planning and risk perception

☒ Jim Schwab

Affiliation: American Planning Association

Areas of Expertise: planning for risk management and education

☒ JoAnn Howard

Affiliation: H2O Partners

Areas of Expertise: insurance, floodplain management, hazard mitigation planning

☒ Juliette Hayes

Affiliation: Federal Insurance and Mitigation Administration

Areas of Expertise: hazard mitigation and management

☒ Kristina Peterson

Affiliation: University of New Orleans, Center for Hazards Assessment, Response and Technology

Areas of Expertise: community resilience 5

☒ Lincoln Walther

Affiliation: CSA International Inc.

Areas of Expertise: hazard mitigation and recovery planning

☒ Lynne Carter

Affiliation: Southern Climate Impacts Planning Program

Areas of Expertise: climate adaptation

☒ Margaret Davidson

Affiliation: National Ocean and Atmospheric Administration

Areas of Expertise: national and local policy in mitigation and management

☒ Matt Campbell

Affiliation: Federal Emergency Management Agency

Areas of Expertise: disaster recovery

☒ Sam Medlock

Affiliation: Association of State Floodplain Managers

Areas of Expertise: floodplain management and law

☒ Shirley Laska

Affiliation: University of New Orleans, Center for Hazards Assessment,  
Response and Technology

Areas of Expertise: community involvement, planning, and management for  
risk reduction

New advisors will be added under Phase 2 of the Resilient Neighbors Network  
to further enhance the knowledge and expertise available to RNN. The  
advisors to be added include:

☒ Bill DeGroot

Affiliation: Urban Drainage and Flood Control District, Denver CO

Areas of Expertise: floodplain management, low impact development and  
mitigation planning

☒ Molly Mowery

Affiliation: Wildfire Planning International

Areas of Expertise: fire adapted communities, wildfire mitigation and planning

☐ Katie Skakel

**Affiliation:** Consultant and FEMA reservist

**Areas of Expertise:** land use and natural resource planning, floodplain management and mitigation, community-based climate adaptation strategies  
Assistance by these advisors has been essential during RNN research and program development, and their on-going help will also be needed to identify and secure the multiple sources of funding and support to carry out the program.

*Project Management Team.* NHMA has created a project management team, including Edward A. Thomas Esq., President; David Mallory, Treasurer; Alessandra Jerolleman, 6

Executive Director; Tim Lovell, chair of NHMA's Disaster-Resilient Communities Committee; and Ann Patton, community outreach and engagement manager. Juliette Hayes serves as FEMA liaison. NHMA's 15-member board of directors and national membership of interdisciplinary experts are also on call to assist the program.

### **Phase 1 work**

During the first year, the RNN organized its program, in conjunction with FEMA representatives; selected ten communities and the Advisory Team; conducted planning and organizational meetings; and developed a detailed program plan, budget, schedule, and committed participants list. In addition to frequent electronic and telephone communications, the group met in a face-to-face workshop in Broomfield, CO, in July of 2012.

The group created a multi-year Framework Plan outlining goals, objectives, and schedules for making the network operational. They created communication venues, including a list serve, website, Facebook page, and written communications. They conducted monthly telephone meetings of the Steering Committee and monthly public webinars highlighting resilience issues and best practices. Perhaps most important, the participants developed personal relationships and trust that makes real sharing possible among peers who are striving toward similar goals.

Phase 1 accomplishments are further described below:

1. Preliminary Network Planning
  1. Planning workshop in May with four communities present
2. Identified ten pilot communities
  1. Primary and Secondary Contacts
  2. Completed Profiles
3. Convened Advisory Team
  1. Preliminary Engagement
  2. Compiled information on areas of expertise
3. Identification of engagement strategy for 2013
4. Convened In-Person Planning Meeting
  1. 7 communities participated
  2. Facilitated discussion of goals
3. Basis for Framework Plan
5. Monthly calls with communities
  1. Have held a total of 8 calls with communities
6. Drafted framework plan for 2013-2014
  1. Feedback from Communities
  2. Feedback from Advisory Team



7. Launched webinar series (recordings available at NHMA website)
  1. 3 webinars held in 2012
  2. 4 webinars held in 2013
8. Outreach about RNN
  1. Presentations at multiple venues involving both NHMA and RNN Communities (Silver Jackets, EMForum, ASFPM, Pennsylvania Workshop, National Hurricane Conference, American Society for Public Administration, Utah Workshop, American Planning Association, American Bar Association)
  2. News Release
  3. Website

### **Phase 2 tasks and deliverables**

For its second year of work, the RNN Framework Plan outlines three major goals to continue developing the mentoring network:

- ☐ identify ways to expand the sharing network,
- ☐ continue to build strong relationships and sharing venues, and
- ☐ identify more precisely what communities need to become resilient.

RNN Phase 2 work will be organized around those general goals, in response to FEMA priorities.

**Pre-Award Costs** – Although the funding is not scheduled to be awarded until September 2013, the grant period is listed from October 1, 2013 to September 30, 2014, there were pre-award activities. Activities during the pre-award period include travel for three staff member to attend a planning meeting in Broomfield CO in July 2013 with RNN Advisory Team members and remotely with RNN Steering Committee members, coordination with RNN community members on presentations at the Natural Hazards Workshop & International Hazard Mitigation Practitioners Symposium, and related work on planning Phase 1& 2 activities. Staff funding to not exceed 60 work hours of the total allocated in funding. This includes any work prior to September 2013 listed in the tasks below.

### **Special FEMA Priority Research on Saferooms**

In response to FEMA priorities, research will be conducted regarding privately funded residential safe rooms in selected communities most afflicted by tornadic winds in the Oklahoma City metro area. This special project under this proposal is included in Task 5.

Need / Purpose for Safe Room Study 8

Each year, people lose their lives during tornadoes. According to the National Weather Service, in the three-year period 2008-2010, 192 people died due to tornadoes. A particularly active year, 2011, recorded 539 deaths in April and May tornado outbreaks. Near absolute protection from tornados can be provided by a well-engineered safe room, where occupants can take shelter in a room, either above or below ground, engineered to withstand even the strongest of winds (tornadoes or straight winds) and to keep wind-driven missiles from penetrating the walls or ceilings. Many, however, cite the cost of safe rooms as an impediment to their widespread adoption. States often work with FEMA to finance some safe room construction, but the funds available are insufficient to allow for 100 percent penetration of residential safe rooms. In some areas, private interests have chosen to fund their own safe room construction. Understanding the reasons for this decision is key to better promoting the use of safe rooms.

#### STUDY QUESTIONS

This study will focus on available data and experience, including personal interviews, and compile a snapshot of information about safe rooms in target communities that can inform recommendations for future actions.

Key study questions include:

- ☐ What is the best estimate which can be made from available sources of the number of individual safe rooms have been built in selected communities in the Oklahoma City area? How many have been built with private funds?
- ☐ What are incentives and disincentives that affected individual family decisions to privately finance and build their own safe rooms?
- ☐ What are recommendations for actions that could encourage more privately financed, qualified safe rooms in areas with extreme risk of tornadoes and high winds?

#### CTP TASKS

***Task 1 – Compile and analyze research about what communities need to become disaster resilient, including best practices and other information from FEMA and both pilot RNN communities, and selected other communities successfully addressing aspects of resilience as identified throughout this scope.*** (September 2013-May 2014)

***Task 1a: Compile and analyze research and reporting instruments to gather additional information about real community needs and possible incentives for resilience from a wide range of projects working on community resilience, sustainability and climate adaptation.*** (September 2013-November 2013) 9

*Task 1b: Document lessons learned in selected local communities.* Identify gaps in current practices and programs, including planning and community engagement, which constrain community resilience. Identify useful incentives toward resilience. (October 2013-January 2014)

*Task 1c: Document lessons learned and projects for grassroots involvement, incentives, education, and engagement in selected communities.* (October 2013-February 2014)

*Task 1d: Report findings.* (February 2014-May 2014)

*Outcomes:* Agendas and minutes, research and analysis documents, and one or more summary reports on ways to encourage and empower community resilience.

***Task 2 – Explore ways to expand the Resilient Neighbors Network’s efforts in safe development and resiliency (June 2013-April 2014)***

*Task 2a: Evaluate the strengths, challenges, and lessons learned in the first phase network development.* (June 2013-September 2013)

*Task 2b: Identify expansion options* for the community network beyond the ten pilot communities, perhaps by additional communications outreach and publicity, by adopting mentoring partnerships with new communities, or other means. (September 2013-December 2013)

*Task 2c: Working with communities and grassroots representatives, develop and test pilot methods* for enhancing peer-to-peer mentoring and outreach to communities working on resilience. (September 2013- April 2014)

*Task 2d: Identify what additional resources* would be needed for network expansion and sustainability. (September 2013-November 2013)

*Task 2e: Consider inviting additional collaborating partners,* such as USACE Silver Jackets, FEMA Recovery, NOAA, HUD, EPA, and others. (December 2013-April 2014)

*Task 2f: Develop a Protocol for involving the RNN Communities and other local Hazard Mitigation/Climate Adaptation stakeholders in the review of major policy and procedural documents in the field of resilience, climate adaptation and hazard mitigation.* This year emphasis will be placed on review of documents and procedures suggested by the FEMA liaisons.

*Task 2g: Update Framework Plan* as needed. (July 2013-October 2013 and January 2014-April 2014) 10

*Outcomes:* Notes on discussions, report on findings, expanded participants list if applicable, updated Framework Plan.

***Task 3 – Continue to build bank of lessons learned and resources that can provide tangible ideas for resilience, sustainability, and climate adaptation at the community level. (12 months)***

Task 3a: In concert with RNN Steering Committee, identify priority needs for additional tangible products that can be used by communities. (September 2013-February 2014)

*Task 3b: Compile and publicize resource guides, such as the NHMA’s “Patchwork Quilt” and 9-step recovery process and/or other useful information for communities, in conjunction with network participants and the Advisory Team. (February 2014-April 2014)*

*Task 3c: Continue to develop and offer webinars, fact sheets, audio and video clips, websites, Facebook page, documents, and other useful resources that can be used by communities seeking to become resilient. (May 2013-May 2014)*

Task 3 d: *Develop a protocol for involving local persons such as the RNN Communities on outreach and educational efforts of NHMA such as our Workshops held in Utah, Pennsylvania and Montana. (October 2013-February 2014)*

*Outcomes:* Agendas and minutes of discussions, bank of tangible products including resource guides and/or other useful products identified in this task.

***Task 4 – Continue to strengthen and test the RNN network for peer-to-peer mentoring and sharing. (12 months)***

*Task 4a: Convene and document a Resilient Neighbors Network Workshop to strengthen network partnerships, identify specific community needs, identify additional sharing avenues, expand network strategy and plans, and offer network feedback to FEMA and NHMA. (May 2014-July 2014)*

*Task 4b – Continue facilitating discussions among participants. Continue building relationships and peer-to-peer sharing through Steering Committee meetings, periodic meetings of the Advisory Team, monthly webinars, and information sharing through websites and Facebook. (12 months)*

*Task 4c -- Plan workshop and outcomes.* In collaboration with FEMA, NHMA will facilitate a discussion among selected community representatives and national experts to develop 11

detailed workshop plans and desired outcomes. Identify agenda, participants, discussion goals, workshop deliverables, and specific questions to be posed by FEMA for network feedback. (April 2014-June 2014)

*Task 4d – Conduct an RNN workshop at a central location, such as the 2014 International Hazard Mitigation Practitioners Symposium.* NHMA proposes to invite community representatives and advisors to a face-to-face workshop/meeting at the 2014 annual International Hazard-Mitigation Practitioners Symposium. Discussion items will include specific ways to encourage and empower communities to become disaster resilient, to improve network communication and collaboration tools, and to expand the network to include additional participants and communities. (June 2014)

*Task 4e – Document findings.* Document lessons shared. (July 2014)

*Outcomes:* Agendas and minutes, including contact database for participants and partners. Summary proceedings, as well as more detailed verbal and (if available) video reports.

*Task 5 - Research and Report on best practices for funding Safe rooms in residences from Tornado Activity.* Using selected communities in metropolitan Oklahoma City, OK, examine the number of residences retrofitted with safe rooms to protect occupants from tornadic activity.

*Task 5a – Scoping and Planning (October-November 2013)*

- Determine key data needs and methods to acquire the data.
- Identify possible target communities, based on factors such as recent tornado experience and availability of data such as systems to permit and track safe room construction.
- Interview FEMA, state, and local officials to determine whether data needed can be obtained for potential target communities.
  
- Select proposed target communities within the Oklahoma City metro area.
- Identify and engage expert team to assist in the study.

*Task 5b – Background Research and Plan Refinement (October-December 2013)*

- Develop timeline of tornado history and other relevant milestones such as regulations.
- Interview selected experts, and local residents to determine what relevant data already exists that can be accessed and to hone study.
- Analyze relevant literature and background information.
- Refine study plan as needed.

*Task 5c – Estimate number of individual safe rooms in target communities (December 2013- February 2014) 12*

- Identify and interview local, federal and state officials, home builders, and prefab vendors who provide individual safe rooms.
- Compile and analyze data on individual safe rooms in target communities.
- Compile estimate of total numbers of safe rooms in target communities, including privately funded individual safe rooms.

*Task 5d – Investigate reasons safe rooms have been built with private funds. (December 2013- February 2014)*

- Obtain contact information, as available, for owners of privately funded safe rooms.
- Interview available, willing owners of private safe rooms to glean information on incentives and constraints that affected their decisions.
- Interview federal, state, and local officials and other experts, including home builders and prefab vendors, for opinions on incentives and disincentives.
- Document research.

*Task 5e – Recommend actions to increase safe rooms in areas with extreme risk of tornadoes and high winds. (January-April 2014)*

- Analyze research and findings.
- Compile draft recommendations for ways to encourage privately funded safe rooms in high risk areas.
- Compile and present report on study findings.

*Task 5f – Compile and present final report on study findings (April-September 2014)*

- Prepare draft report.
- Coordinate FEMA, state, local and appropriate PNP review and peer reviews by NHMA and Resilient Neighbors Network.
- Analyze comments and update report.
- Submit final report.

Outcomes: Final report on research that includes estimated numbers of safe rooms in target communities in various categories; working bibliography of relevant literature and contact information of interviewees, action recommendations on increasing number of safe rooms in at risk areas; and other background documentation on the research team and the research process.

## Appendix B

### Natural Hazard Mitigation Association Workshops and Peer Consults

For more information contact: Alessandra Jerolleman, Executive Director, NHMA  
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**The Natural Hazard Mitigation Association (NHMA)** is a national organization of mitigation practitioners and professionals. Our members are joined in dedication to help our nation achieve the *goal of reducing the devastating impacts of natural hazards and improving public safety, health and community well being.*

NHMA offers **Workshops** and **Peer Consults** to state and local public and private organizations embarking upon community resilience and mitigation. We bring national expertise and lessons learned from experience to help you establish local training, action groups and resilient neighbor networks (RNN).

NHMA workshops and consultations encourage each participant and organization to create and advance an “Action Plan,” to support their own community and arena of practice.

#### **NMHA WORKSHOPS**

NHMA Workshops include expert presentations, tools and resources, and team-building exercises. Presentations are custom-tailored to help you improve your community’s safety and resilience and to identify issues for resolution and implementation in mitigation plans and projects.

We focus on “Tools You Can Use.” Workshops topics are selected to enable your organization to learn about and apply the latest mitigation practices best suited to your particular community.

Workshops may be short, one-day presentations, or two- to three-days. A Workshop may focus on only one topic (e.g., legal aspects), or may include a broader spectrum, e.g., multi-hazards, sustainable and resilient development.



## NMHA PEER CONSULTS

A NMHA Peer Consult is an intensive visit by a small, select group of mitigation experts. Each team is selected to address the unique and specific challenges that your organization or community defines. An NMHA team may include legal, financial, planning, engineering, architecture and building topics, as well as community organization, social and public health, targeted to a specific set of issues or local project area.

Preparation for a NHMA Peer Consult includes documentation of present conditions, reports, and related information to serve as advanced briefing for the team. A preliminary visit by an NMHA team member may assist in such preparation. Once preparation is in order, the NHMA Peer Consult will include a schedule of on-site meetings, from three- to four-days with you and your local team, working intensively in addressing the brief. Such visits typically include field inspection of areas of concern, one-on-one or team intensives (peer to peer), and presentations to larger groups, possibly public meetings as appropriate. Deliverables are defined in advance and delivered (in DRAFT form) before team departure.

### **What do participants say about NHMA?**

NHMA carefully evaluates all of our programs, fostering a spirit of continuous learning and improvement. Here is what our attendees have told us (full reports available on request).

- *Excellent speakers and great involvement of attendees. Best informative, motivational workshop I have ever attended. Much appreciation for world class speakers.*
- *Comprehensive topics - animated / passionate speakers.*
- *Basic principles of coordination between public entities. Power of "No." Power of "Yes." Public and private owners do not have the right to adversely affect other properties.*
- *Great workshop. Very entertaining and informative. This information needs to be in the hands and minds of local administrators and policy makers, i.e., City Managers and Council members.*
- *Real world examples and solutions, specific examples. Case studies. Book recommendations.*
- *The legal examples for future use. David Mallory's examples for the development in the floodway were a great way to relate information to us, as city officials.*
- *Out of state presenters did an outstanding job of making their presentations very local - Great!*
- *Locally relevant examples! Case studies. Easily obtained outside resources. Presenters were excellent. Good ideas on why mitigation planning is a fundamental duty.*
- *I liked the legal issues and they were discussed and how to get to yes and say no. Don Watson remarks very good as was David Mallory (Colorado cases).*
- *All presenters obviously went to a lot of effort to make their presentations specific to our (the Utah) area and condition.*
- *Interaction/group discussion from local communities prompted and based on speaker information. Appreciated hearing multi-hazard management: flood, fire, drought and watershed scale planning.*
- *Discussion with peers. Input from Thomas. Real-world applications.*
- *Monday afternoon's discussion--learning from other communities about challenges, successes. Very constructive discussion. Legal discussions, court decisions, takings discussions - great!*
- *The positive way in which the messages were delivered. Examples were good and participation of everyone encouraged.*
- *Great to find out what resources are available. Very interesting information on mitigation. Good to think about being "proactive," rather than reactive*
- *Interaction with people was great. Handouts with contact info and educational info very helpful.*
- *Plethora of resources provided, which really helps me to carry this message forward. All presenters were very well versed and educated in their topics.*
- *Mitigation = prevention of disaster. The quality of the speakers was phenomenal!!*
- *Appreciation you showed for the work we're doing.*



