

A LOCAL APPROACH TO EMERGENCY  
MANAGEMENT: KNOWLEDGE  
DISSEMINATION AND HOUSEHOLD  
PREPAREDNESS IN CENTRAL  
MASSACHUSETTS

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Submitted in partial fulfillment of the requirement for the degree  
**Master of Science in Urban Planning**  
Graduate School of Architecture, Planning and Preservation  
Columbia University  
May 2012

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A handwritten signature in cursive script, reading "Erin Lavelle".

April 16, 2012

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## Acknowledgement

I would like to thank a number of important individuals who assisted me with the completion of my Master's thesis. First off, I would like to thank my friends and fellow classmates who assisted with their input and brainstorming at the beginning of the process. Thank you for your ideas and for being there to listen when the process became overwhelming at times. I am very grateful to all those who met with me or spoke with me over the phone for my interviews. These include, the employees of the Massachusetts Emergency Management Agency: Patrick Carnevale, Peter Judge, and Mike Philbin; Mike Dunne from the Central Massachusetts Regional Planning Commission; and to David Durgan of Northborough – thank you very much for your time, knowledge, and expertise. Lastly, I would like to thank and acknowledge my thesis readers, Ethel Sheffer and Jeffrey Lowe (who is also my advisor). Thank you for your input and comments which helped to greatly improve my work and provide me with more direction.

## Abstract

Current literature regarding a planner's role in emergency preparedness falls short in delivering specific recommendations on how they can disseminate information and truly involve the community in order to prepare for a potential hazard. This thesis will investigate how planners reach out to the community and disseminate knowledge and resources at the local level, using Central Massachusetts as the principal place of study. The thesis will explain the number of approaches that urban planners and emergency managers are currently taking to reach out to a community and ensure that every household is well educated and prepared for any potential hazard in their area. Based on the experience of Central Massachusetts, this thesis hopes to provide recommendations that can be generalized to planners who are hoping to deepen hazard preparedness in other locals. Emphasis will be placed on the challenges of reaching every household, as well as the recommendations for local municipalities, emergency managers and urban planners for ways in which they can improve the process.



## Introduction

In 2010, 385 natural disasters killed over 297,000 people, affected millions more and caused billions of dollars worth of damage (Guha-Sapir et al, 2011). The United States was ranked the fourth highest country in number of reported events for the year with 13 (Guha-Sapir et al, 2011). Galveston, San Francisco Earthquake, the Dustbowl, Katrina, along with yearly fires and tornados are familiar names and common events to many living in the United States. Each of these disasters started out as a hazard. The American Planning Association defines a hazard as “an event or physical condition that has the potential to cause fatalities, injuries, property damage, infrastructure damage, agricultural loss, damage to the environment, interruption of business, or other types of harm or loss” (Schwab et al., 1998, p. 326). The keyword in that definition (and in any academic definition of the word) is “potential.” Hazards have the potential to cause damage and loss. The Federal Emergency Management Agency (FEMA) defines a disaster as “an occurrence that has resulted in property damage, deaths, and/or injuries to a community,” (FEMA, 1990) while the UN says a disaster is “a serious disruption of the functioning of society, causing widespread human, material, or environmental losses which exceed the ability of affected society to cope using only its own resources” (UN, 1992). Hazards only have the potential to become disastrous. Disasters continue to occur year after year and they are not likely to stop. If residents are involved in the planning and preparedness process, educated about the risks, and have the right resources, damages can be mitigated. However, even though people are aware of the consequences, they aren’t taking the proper steps to prepare themselves or their families for a potential emergency event. Planners need to influence the individual person and involve the community. For this to happen, information needs to reach these individuals in order for them to be well-informed and involved in the planning and

preparation process. However, each person needs to take it to the next step and prepare themselves for whatever might come their way.

### *Purpose of the Thesis*

Millions of people live in areas with high risk of disasters. People live on the coast, build their houses on land with steep slopes, and often do not have home insurance. By doing so, they increase the risk that a hazard will intensify and cause more damage to their area. Perhaps it is society's attitude towards its natural environment and the hazards around them that put them at more of a risk or perhaps it's their lack of information. Each year thousands of lives are lost and homes and businesses are ruined, but this doesn't need to occur. There are ways in which communities can take the proper steps in order to prepare for a potential disaster. It doesn't just involve state regulations or smaller municipalities creating emergency management plans; it involves the individual and the steps they can take ahead of time within their household to best prepare themselves and their family. How do planners reach out to the community and disseminate knowledge and resources in order to mitigate the effects of a hazard? The purpose of this paper is to explain the number of approaches that urban planners and emergency managers are currently taking to reach out to a community and ensure that every household is well educated and prepared for any potential hazard in their area in order to mitigate the effects of a hazard. I will emphasize the gaps and challenges of reaching every individual in a community and make recommendations for ways to improve the process. While there are many similarities between jurisdictions with regards to the dissemination process in preparing for emergencies, I will be focusing on a local approach that begins at the state level and works down to the individual household. Therefore, this paper will discuss Central Massachusetts and how information begins at the state's emergency management agency and disseminates down to the



individual within one of the 40 towns in the Central Region. Based on the experience of Central Massachusetts, this thesis hopes to provide recommendations that can be generalized to planners who are preparing or hoping to deepen hazard preparedness in other locals.

Academic journals and literature consistently tell planners and planning students that community participation is not only important, but absolutely necessary in proper disaster planning. However, what's truly important is to find ways in which planners can genuinely reach people and get them involved in the process. They need to be more specific and prescriptive in their academic writing. Holding meetings and inviting the community does not ensure public participation in the planning process. Through education of all ages, professional assistance, local organization involvement, media cooperation, and local land use policy adjustments and regulation, planners can reduce the effects of natural events including a noticeable reduction in property loss, social disruption and human casualties. I will discuss how Massachusetts planners and emergency management officials are using techniques to reach and involve the community, as well as the effectiveness of these approaches.

## **Research Design**

In order to answer the question of how best to disseminate information and involve the community prior to the occurrence of a hazard, I conducted various forms of research. First, I completed initial research efforts which entailed exploring websites by MEMA and CMRPC, as well as reviewing published documents about hazard mitigation and preparedness. This was undertaken to gain a better understanding of how both agencies worked and to better understand the type of work that they do in order to develop the questions I would use to interview and wish to look more into. Next, I used qualitative data from interviews conducted with employees of

MEMA and CMRPC as well as town officials. Lastly, I used secondary data from two national surveys that were conducted in 2004 and 2009. I focused in on one region, and analyzed that region's process in order to understand what strategies are successful and where the shortcomings exist. I conducted interviews with professionals and those involved in the information dissemination process in Massachusetts, gathered and referenced current best practices in the field and put forth my own ideas and recommendations on the topic.

I first researched the general concept of knowledge dissemination in terms of emergency preparedness and the effect that personal preparedness has on the loss and destruction of a hazard. Next, I researched how Massachusetts operates and informs residents on how best to prepare. In order to gain a more accurate picture of this process, I interview a number of professionals directly involved with the planning and communication. The goal of these interviews was to find the real answers to my questions on how information starts at the top level (MEMA) and works its way down to the individual resident. The professionals and representatives further explained the process in more depth and gave their opinions on its successes as well as its limitations. Based on their answers and responses from two surveys conducted at the national level, I was able to analyze the dissemination process and be able to suggest improvements. The main purpose of these interviews was to find out firsthand what the situation is currently - i.e. problems and success - and find ways to improve the process of information dispersal to the members of a community both in Massachusetts as well as throughout the country. Simply doing research online would not be enough to fully understand how information is passed from MEMA down to the CMRPC or other officials, to the local emergency management director and to the residents of a town. By speaking to people from both MEMA and representatives of the community, I hope to fill in the gaps. Each of those

interviewed were found from MEMAs website, were recommended by others interviewed or randomly selected from town websites. The list of questions I asked the MEMA and CMRPC employees as well as town Emergency Management Directors can be found in the appendix at the end of this thesis. After these interviews, I understood the dissemination process as it works in Central Massachusetts and was able to draw connections between their answers with the responses from the surveys. I sought examples from other regions throughout the country which use specific techniques in order to gain involvement and disseminate information. I also provide my own ideas on reaching the residents with information and resources as well as how to get the community more involved in the planning and preparedness process. My overall goal is to provide recommendations to make to Massachusetts planners as well as planners in similar regions throughout the country, while also discovering existing challenges and identifying which challenges have solutions and which challenges can be overcome intermittently versus some that may still require long-term solutions.

### *Format*

This paper will begin by explaining how disaster planning and emergency management functions in the state of Massachusetts and what various agencies and regional groups have done thus far to prepare the region for hazards that occur in the state. I will then discuss various academic works focused on emergency preparation, while also introducing the shortcomings in academic literature regarding planning for disasters and the absence of instructions and guidelines for how planners can successfully involve the community and educate the people on risk mitigation techniques and personal preparedness. Using examples that have occurred in various states, the types of community involvement will be categorized. From there, the paper will discuss how local communities in Massachusetts (as well as similar towns throughout the

United States) can distribute resources and information about disaster preparedness to their residents and empower the individual. Following the literature review, I will explain the results from the various interviews I conducted with several employees of the Massachusetts Emergency Management Agency (MEMA) and the Central Massachusetts Regional Planning Commission (CMRPC), in addition to local emergency management directors. I will clarify who each interviewee is, as well as their role in the dissemination and preparedness process and emphasize the gaps in information dissemination from the state and regional level down to the local community and individual resident. The interviews will lead into results from two surveys released in 2004 and 2009 by the American Red Cross and The Department of Homeland Security's *Citizen Corps* regarding personal preparedness for disasters. Next, I will conduct an analysis of the results from the interview responses and the data from the two national surveys. I will finish with recommendations and conclusions based on the results from the analysis. The paper will provide opportunities for planners to further their involvement in the emergency preparedness process and get other groups and professionals involved, while also recognizing our limitations and the challenges that come with attempting to reach every person in the community.

## **Background**

In many other states throughout the U.S., governmental functions are performed at the county level, but in Massachusetts, they're mainly done at the state level; counties are merely geographic divisions. Massachusetts has an Emergency Management Agency at the state level similar to many states. The Planning Department within this agency assists communities with their Comprehensive Emergency Management Plans (CEMP) and supports any mitigation, preparedness, response, and recovery efforts that the community might take on. In 2008, MEMA

published the *Local Emergency Management Program Guide Book* which is directed at both Emergency Management Personnel as well as municipal officials. This document's main purpose is to explain the responsibilities and aspects of the field of emergency management. One of the goals of the state's hazard mitigation plan that is pointed out in the guide is to "increase coordination and cooperation between state agencies in implementing sound hazard mitigation planning and project development" (MEMA, 2008). The real coordination and cooperation is lacking between the local communities and within each community. The state publishes and distributes guideline documents like this and expects that they will be carried out. However, there are challenges that cause gaps between the top tier (MEMA) and the bottom tier (the individual family and person) in disaster planning. (These gaps will be discussed in more depth later). It is important for these documents to include explanations and suggestions for how to connect these tiers and establish relationships from the top to the bottom to ensure that information in the guidelines is passed down to the bottom level.

Although emergency management exists at the state level, MEMA is mostly there to provide guidance and assist local communities when needed, as shown through the use of the guide book and what came to be understood through the interviews. In Massachusetts, functions such as transit and planning are performed at a regional level. The state of Massachusetts has 14 counties. Massachusetts has regional planning commissions such as the Central Massachusetts Regional Planning Commission which has 40 communities from different counties. About half of those communities do not have a full-time planner on staff. This is where it is essential that they take advantage of MEMA's regional representatives and the CMRPC staff as a vital resource. The fact that many of these communities do not have full-time planners and emergency

management directors is one of the reasons for the potential breakdown in dissemination of information from the top level to the bottom.

Appointments from each of the 40 governing bodies form the community planning team. The appointments are the primary point of contact between the region and the community as an individual. When the CMRPC contacted each of the CPT representatives in 2006 to organize a meeting regarding the regional pre-disaster mitigation plan with the public, community officials and the CPT representatives, only half of the communities responded. Each of the participating communities in the plan was responsible for implementing locally specific mitigation actions. Around 2007 through 2008, the pre-disaster mitigation plan became pretty much inactive because of low community participation as well as staffing changes at the CMRPC. A year later a huge ice storm occurred in the region which helped to refocus everyone's attention back onto the completion of the document. It's unfortunate that hazards need to happen before people will begin to plan, however, it happens all too often that people only take action and prepare after something has warranted them to do so or immediately after an event. This became incredibly apparent after speaking with officials from MEMA and their opinions on residents' personal preparedness.

In order to distribute and share information, the CMRPC used electronic information sharing to gain most of the feedback and input on the PDM as it was being developed. The plan was reviewed by elected officials, consultants, as well as the CPTs. Occasionally feedback was given from anonymous members of the communities. A draft of the plan was then put on the agency's website where they believed it was "widely advertising" the material's availability and able to reach non-profit organizations, educational institutions and the general public. Other than encouragement of community involvement and the passing of information via the internet or

printed documents, there was no strong effort to reach out to the residents of each of the communities with this information or any other important facts regarding disaster mitigation besides the dependence on the CPTs, of which there was no real accountability. The Central Massachusetts region organized and created the document and expected the local communities to implement their own strategies. On a similar level, MEMA distributed its documents and expected people to read and follow their guidelines. The purpose of this paper is to discuss the continuation of the trickling down of information and resources. The state passes their info down to the region and the region is attempting to pass theirs down to the communities. However, is it reaching the individual and how can planners improve the process of information dissemination in order to best prepare people for hazards?

In the last year, Massachusetts has experienced a tornado, earthquake, hurricane and the usual flooding and winter storms that occur practically every year. Now, more than ever, there is a growing need for people to be informed and prepared for any potential hazard. Action at the state and regional level is not enough to mitigate the effects. Families need to be informed, have a plan and insurance, make the proper adjustments to their homes and educate their fellow neighbors. Information needs to descend all the way down to the individual, and planners are the ones who can establish the right connections in order to make that happen.

## **Literature Review**

Current literature regarding a planner's role in emergency preparedness falls short in delivering specific recommendations on how they can disseminate information and truly involve the community in order to prepare for a potential hazard. Planning vocabulary and fancy phrases are used to direct a planner's role and describe their functions prior to a hazard; however,

specific examples and best practices are rarely recommended. It's clear that education, raised awareness, and public outreach are necessary for obtaining community resilience and improving public safety; the problem is getting to those strategies in order to reach those goals.

In the American Planning Association's book *Hazard Mitigation: Integrating Best Practices into Planning* the authors sufficiently provide best practices in terms of overall preparation, planning, execution and recovery of hazards, however they fail to go into depth on how a planner can deliver information to the community before a hazard occurs. The book prescribes that planners initiate public dialogue through effective public outreach and education, but does not explain how one might do that. It is easy to tell someone to initiate discussion with the public, but how do you get them in the room in the first place? How can planners successfully reach out to them? The book states "civic context is a major factor in successful planning" (Schwab, 2010). Schwab, among many academics and planners in the field, recognizes the importance of public outreach and participation, yet there's so little published work explaining to planners how they can successfully reach out to the community. Later he writes, "Planners can help by initiating the public dialogue before disaster strikes, helping people to understand the urgency of the problem through effective public outreach and education," and then fails to describe what "effective" public outreach is or provide examples (Schwab, 2010).

The U.S. Department of Health and Human Services advises planners to "encourage people to be prepared." They state that planners should encourage people to learn the resources that are available to them and know who provides them (HHS, 2012). This is another example of throwing out an idea without the proper advice on how to achieve that goal. That is not to say that empowering the individual is not an important concept because indeed it is likely the most important part of awareness, however, it is up to the individual to act on their newfound



awareness. This paper is not meant to criticize what planners and emergency managers are doing, but to provide examples of alternatives on how to empower the individual to prepare themselves and for planners to recognize their own limitations in this practice. In FEMA's *Guide for All-Hazard Emergency Operations Planning*, the 279 page document discusses for only two paragraphs the importance of an aggressive public education and information campaign as a key ingredient of an effective emergency preparedness program (FEMA, 1996).

In *The Importance of Information Management for Disaster Reduction in Latin America*, the authors wrote, "Managing disasters is managing information because reliable information is the most valued commodity before and after a disaster" (Lopez et al. 2010). This is why the dissemination process is so critical before a disaster. The only way to have some control over a hazard is to be prepared for it, and the only way to be prepared is to be educated and have the appropriate resources. However, local governments can't always rely on the federal government to do all the work and preparation. At some point in the dissemination process, the local community must work hard to reach all of their residents. Larry Langton touches on planning for disasters and emergency management at a local level in a chapter of his book *The First 72 hours: A community approach to disaster preparedness*. He provides questions that local municipalities should be asking themselves, in order to ensure they are prepared for a hazard. He, like many authors already mentioned, does not provide concrete examples of citizen involvement. However, he explains how disasters are and always will be seen in local perspective. In large scale events, assistance at the federal level will take about 72 hours, and in the meantime, municipalities are on their own (Langton, 2004). He emphasizes the importance of professionals to plan and prepare at the local level and that disaster preparedness is everyone's responsibility; everyone has a role. The town's residents have every right to expect that their local government

has done everything necessary to be prepared. However, it is also on the individuals to be well prepared and this matter will be later discussed in the “Analysis and Implications” section. He creates a list of questions that he believes are part of a longer list that communities must ask themselves. Some of these questions include:

- Do we have an emergency plan? Is it coordinated with a regional response?
- Are our community officials knowledgeable about the plan and its implementation?
- Do our schools and citizens have a “shelter in place” procedure?
- Have we provided for the protection of vital community records?
- Have we provided information to our citizens on how to create a family emergency plan and home disaster kit, where to receive local emergency information, and how to obtain additional information?

(Langton, 2004, p 241)

These are just a few examples of the dozens of questions he provides on his short list.

Having the right relationship with the media is just as valuable as reaching out to the individuals of a community. The media is part of the community’s everyday life. They provide rapid dissemination of information during a time of emergency and have the ability to localize warnings and information, so it makes sense to involve them and develop a relationship with them during the planning process. They are experts in communication and if used properly, the media staff can work with the local government to develop an effective outreach program regarding potential hazards and risk reduction. MetEd’s *Flash Flood Early Warning System Guide* has a chapter on Community-Based Disaster Management that provides the following tips for establishing a relationship with the media:

- Meet your media partners and get to know them *before* an emergency. Exchange contact information, invite them to visit the office and meet your staff, and establish a working relationship.
- Educate media partners about the hazard. Provide them with scientific information and detailed warning process information, including desired

responses and outcomes, through workshops, pamphlets, brochures, fliers and handouts.

- Working with news directors and editors can be fruitful as these are the individuals who make decisions about what gets air time.
- Include media partners in practice drills.
- Anticipate the story. Create/provide background video and canned interviews with scientists for later use. Decide who will be knowledgeable and available to speak with media during an emergency.

(University Corporation for Atmospheric Research, 2010)

Some of these tips would work when reaching out to community based organizations and faith based organizations in one of the Massachusetts towns. As MetEd points out, meeting these people and developing a relationship before a hazard occurs is essential to the planning process.

This work of literature, along with many others, mainly focuses on the immediate emergency and how to quickly and efficiently disseminate important information to residents. Authors discuss dissemination of information as a reaction to an emergency rather than the preparation for one. What many authors overlook is the importance of how to efficiently disperse information way before an emergency.

In a resource manual on risk management for community-based management, a study in the Hindu Kush-Himalaya region found that communities should be involved in the development of flash flood risk management programs if activities are to be successful and sustainable (Shrestha et al, 2008). They stated that the local people understand the opportunities and constraints of their land and could therefore identify and resolve many disaster vulnerability issues. They would know better than any outsiders and not only are they concerned with local affairs and their own well-being, but they have an obvious personal interest in avoiding any potential hazards that could occur. There is a lot of current literature that recognize the

importance of working with the members of a community, yet there is so little that advises planners on how to go about doing so.

Planners have a skill set that is quite broad and diverse. They have an understanding of a range of topics that make them incredibly useful in planning for a potential hazard or emergency. Planners are equipped with experience in goal-setting, communication, and the technical skills to draft a plan. Each of these qualities makes them prime candidates for educating the public and reaching out to the community with regards to information on risk reduction and resiliency of communities. This is a major reason why planners are emergency managers or are often involved in the emergency planning process.

#### *Examples of Education, Raised Awareness and Public Outreach*

Based on the aforementioned literature, there is clearly a need for more prescriptive work that includes examples, best practices, and specific directions on how to get the information out and how best to involve the community. Current literature for planners is lacking in proper recommendations because they're too vague. The best way for planners to learn about successful methods of dissemination of materials and information as well as community outreach is from real stories of examples and practices of education, community involvement, and individual participation. Many of these examples can be found in other municipality's plans and published documents as well as on FEMA's website where they have over 70 mitigation best practices from all over the country. These, along with many others that will be discussed throughout this report, can be separated into 3 categories: education, raised awareness, and public outreach. One example of education is a pre-school in Mississippi that had FEMA Community Education and Outreach (CEO) specialists come to speak to the young children about disaster preparedness. The students were given backpacks with non-perishable foods, batteries, a flashlight, a book that

describes how to be ready in any situation, and a form for their parents to fill out. The CEO specialists believe it's important to educate people of all ages on how to be prepared and mitigate the effects of a potential hazard. Empowering children has a huge impact on getting their parents to act on preparedness. When a child comes home from school and is excited about what they learned that day about emergency preparedness, they will share this information with their parents and want them to prepare their household. Children carry a large amount of influence on their parents' actions; raising awareness in children will consequently raise awareness in their parents and other siblings.

The next category of community involvement and dissemination strategies is raising awareness. A Connecticut woman, Gail Cunningham Coen, took raising awareness into her own hands when she became a "mitigation activist" and began ensuring that information on flood control and elevating your property circulated to her fellow neighbors (FEMA, 2011). In 1992, a flood destroyed the first floor of her home. She heard about elevating her home and decided to register with her town for a grant through FEMA's Hazard Mitigation Grant Program (HMGP) to help pay some of the cost of the procedure. Gail then began to spread the word to her neighbors about the HMGP and helped get funding for 20 homes to be elevated and local businesses to be retrofitted. Another example of awareness is an example from Shelby County, Tennessee where an initiative called *ReadyShelby*, was created to draw awareness to disaster risks and how people need to prepare themselves (FEMA, 2011). In 2006, a non-profit organization began thinking about disaster preparedness and how to bring tips to their neighbors and fellow citizens. They started by initiating meetings with local government officials. After gathering important information and resources, the group then organized a number of focus groups in order to understand the public's opinion on this. Jan Young, the non-profit's executive director said,

“They wanted to hear something positive, so we took all that literature and all the results from our focus groups, and we hired a local advertising agency to come up with a brand emphasizing the individual citizen’s position of self-empowerment.” Through this, they came up with *ReadyShelby* and turned to the faith based organizations first to help disseminate the knowledge with a friendly competition between parishes, of which, 60 participated in “I’m Ready Sunday.” This is also an example of community outreach since they held the meetings with the focus groups and reached out to the parishes in the Memphis area. Raising awareness through information on a website, billboard, commercial, organization listserv and more, are great ways to notify the public and get them to think about what they could be doing to prepare.

Another example of community outreach occurred in Florida where a task force was created to address the continuing threat of wildfires. The task force formed 4 mitigation teams from members of the community, and they had 2 purposes: reduce the vegetation that fuels the fires and promote the benefits of wildfire mitigation through education and outreach programs. The teams created publications and offered workshops for homeowners and business owners. The workshops cover topics like weather conditions, fuel reduction techniques, and ways to protect homes and businesses from fires through the use of fire-resistant construction materials and other simple ideas. This is an example where the government was able to create a team of people and then reach out to the members of the community to get them involved and educate one another on risk reduction techniques. Community outreach doesn’t always need to involve multiple attempts of actual contact. Sometimes setting up just one meeting and providing people with an idea can ignite a community who wants to be involved and takes pride in their neighborhood but doesn’t know what they are actually capable of.

These 3 categories of dissemination of information and community involvement will be discussed more throughout the report when recommendations are made to the local communities of Massachusetts. But based on the aforementioned, there are a number of easy ways in which planners can initiate these ideas in a community and motivate the individuals of a town to take action, even with limited resources, time, and money.

### *National Surveys*

There are two national surveys which have relevant results to the research of this thesis. The first survey was conducted by Wirthlin Worldwide in June of 2004 for The American Red Cross. It is titled *Attitudes and Behaviors Toward Disaster Preparedness*. It has the results of 1,001 adult Americans responding to questions regarding the importance of preparedness. The second survey was conducted in 2009 by FEMA's *Community Preparedness Division* and *Citizen Corps* with the purpose of "evaluating the nation's progress on personal preparedness and to measure the public's knowledge, attitudes, and behaviors relative for a range of hazards" (FEMA, 2009). The sampling size was larger than the previous one, surveying 4,461 households. Both of these surveys have interesting results which will be discussed in more depth in the "Findings" section.

## **Findings**

The data gathered came from several interviews conducted with Massachusetts emergency management and planning officials and local representatives, as well as results and conclusions from two national surveys: one prepared for the American Red Cross in 2004 and the other conducted by FEMA's *Community Preparedness Division* and *Citizen Corps* in 2009.

### *Interviews*

The following list provides the names and titles of the people I interviewed in order to obtain accurate information on the dissemination process in Massachusetts, the type of information that is broadcast to citizens, and the level of commitment and preparedness that communities have.

**Patrick Carnevale** – Regional Manager, Central Massachusetts – MEMA

**Mike Philbin** – Planning Department Coordinator – MEMA

**Mike Dunne** – Homeland Security – CMRPC

**David Durgan** – Northborough Emergency Management Director (Emergency Preparedness Coordinator)

**Peter Judge** – Public Information Officer – MEMA

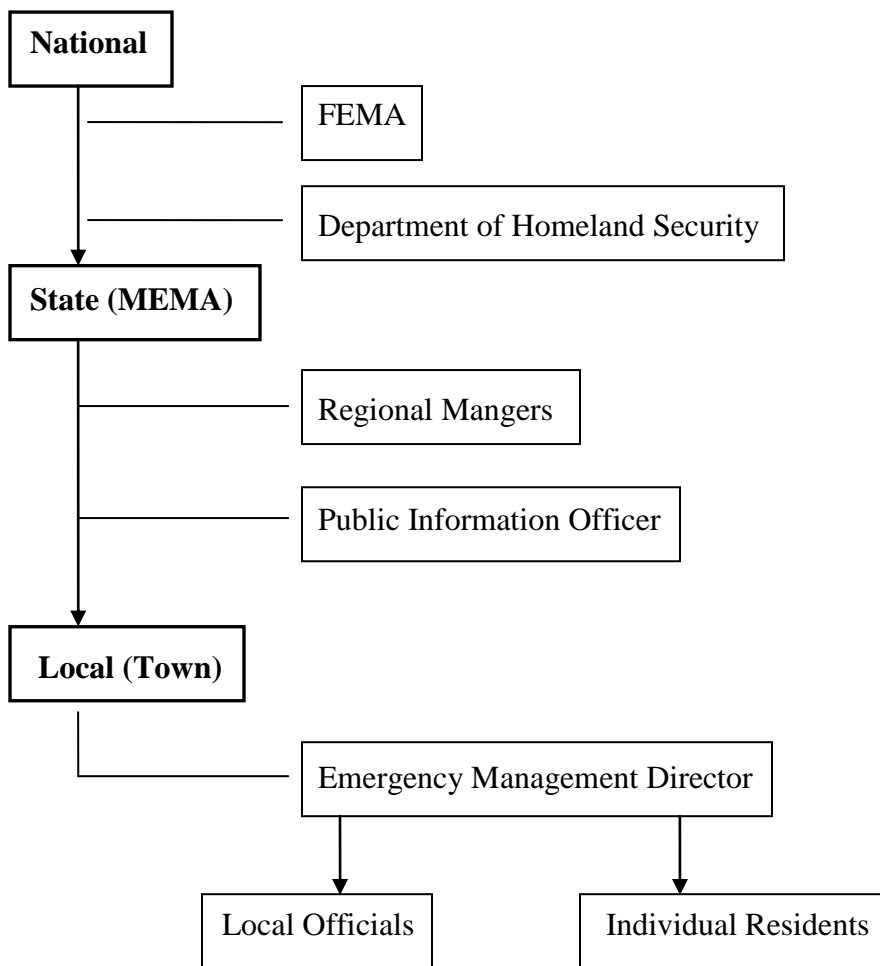
Many of the interviewees work together or have worked with one another at some point in their career. This is supported by the fact that planning and preparedness requires communication at various levels of government and by the previous research discussed in the background section. Discovering that these subjects know one another and often collaborate was expected. Each of them was selected to be interviewed because of their job responsibilities or because they were recommended by another one of the interviewees. Patrick Carnevale, Mike Philbin, and Peter Judge are all employed by the Massachusetts Emergency Management Agency and respectively work to create plans, maintain relationships with other agencies, communicate with the public and assist the local municipalities with their emergency plans and preparedness.

When explaining the process of how information gets from the state level down to the individual, the respondents provided very similar statements, showing continuity in the system. Every town has an emergency management director. Everything that MEMA has is given to the directors through the regional coordinators. The state relies on local directors to coordinate with them and with their own community in order to do outreach and education. They pass the



information on to them and hope that it reaches the community. **Figure 1** displays graphically how information reaches individuals based on the process as it was explained to me. It is important to note that this is not the only path in which residents receive information on preparedness. Any of the branches above can provide information and reach out to the individual.

**Figure 1:** A visual representation of the information dissemination process.



When responding to whether or not there is anything in place to ensure that information reaches households, Patrick Carnevale, a regional manager for MEMA, responded, “The state doesn’t want to go into communities because of local home rule. We give the info and hope that they

will share it.” Information is also disseminated to the residents by the public information officer and through the media. Peter Judge has this position at MEMA and explained his role as the spokesperson for the commonwealth during times of disaster and the one responsible for pushing information out to the public on a number of different levels. Through press releases, a website, local media (such as cable shows and columns in the newspaper), and social media, Judge gets his message out to the general public. All of the info that he disseminates through the variety of modes of communication, is also given to the local emergency management directors. He makes himself available to do cable shows and explain to a wide audience the steps they can be taking before or after an emergency event to become resilient and recover quickly.

MEMA has a number of field offices in addition to their headquarters. Those individuals who work at the field offices often attend local public meetings in order to provide information and support to the local municipality and the residents. There are 2-3 staff members for about 80 towns. MEMA employees and CMRPC staff explained that they receive emails and phone calls on a weekly basis asking various preparedness questions, seeking resources, or requesting education or training to be given to their community, organization or religious group. The regional managers and the coordinators within the office, such as Patrick Carnevale, try to check in with each town once a month, even if it is a simple phone call or email when he can’t physically attend a meeting. Making themselves available is essential in this whole process; as Carnevale said, “The more visibility we have, the better it is in the long run.”

Now that the process of how information reaches the local level has been clarified and the type of support that MEMA and the CMRPC provide has been explained, it is important to know the different types of information that is being sent, as well as the limitations that come with communicating and reaching everyone. There are programs and guides that are posted both

online and distributed in print. These guides describe what a person can do to prepare their household for an emergency, for example, establishing a plan for their family regarding where they will meet and how they will communicate, preparing supplies and purchasing food and water in the event that there is a loss of power, etc. Seasonal information is distributed in the winter that advises the different items people can buy for their home and car and the steps they should take to stay safe during blizzard season. Information is also provided in the summer with regards to hurricanes and flooding. Online maps and copies in town libraries are provided so that people can see whether or not their land lies in a floodplain. Mike Philbin explained that people often call with questions about floodplains, and he is able to direct them to the right person or resource. He says that MEMA is a clearing house for pointing people in the right direction in order to obtain the right information and materials that cater to their needs. To best assist local communities with their own plans, MEMA recently developed a web-based planning tool just over 5 years ago where communities can map their infrastructure. It assists them in writing their own comprehensive emergency management plans and runs parallel with mitigation plans. They are essentially asking communities to map out where their infrastructure is in regards to hazards. Philbin said that about 70% of Massachusetts towns use this tool and the other 30% write their own and are asked to upload them.

Presentations and educational workshops are provided when organizations, schools, clubs, and faith-based groups request them. Usually, word of mouth helps to spread awareness of these presentations. One group heard that Peter Judge presented to a local club and shortly after, they too requested him to present to their organization. Relying on word of mouth to spread awareness is a useful and unintentional effect of in-person meetings with the community.

Lastly, information presented at meetings with the emergency management directors can also be given to residents. The regional coordinators have quarterly meetings with the directors where all types of new and updated information is passed on. So how effective are MEMA and CMRPC representatives in their outreach? Philbin believes it's an interesting question and if they're not effective, it's certainly not for a lack of trying.

In terms of individual preparedness, all of the respondents were in agreement concerning the level of awareness and preparation of local residents. Massachusetts residents tend to be a bit complacent whereas, people from other states are perhaps less so. There was a great consensus in the fact that awareness is much higher directly following an emergency event. For example, immediately following Tropical Storm Irene, people were going out and purchasing generators and disaster kits. However, the farther away we move from an event, the more people forget the impact it had and how inconvenient and awful life was when they didn't have power and/or water. Also, even though information is provided, people don't think it will happen to them. They think the probability is low that a large event will occur and also that it will have an effect on them. In California, they expect large events like earthquakes so they are well prepared for them. They have drills all the time. Mike Dunne thinks that unfortunately an event has to occur before people will begin to plan and prepare. A large event like a hurricane or winter storm is a big wake up call. After an ice storm in 2008, there was a lot of activity. Dunne remembers a lot of towns and cities ramping up their preparedness level over the last few years because of that storm. He hopes that that sort of energy and awareness filters down to the citizens. Carnevale made comments on citizens' dependency on the government. People want home rule but still expect state and federal agencies to jump in when it comes to assistance during an emergency. A lot of people don't prepare for themselves because they expect outside assistance and have high

expectations for the type and level of support and relief they will receive in the event of a storm, flood, or blizzard. Given the consensus from people who work with and speak with residents about disaster preparedness firsthand that believe Massachusetts residents are not as prepared as they should be, it is time to take a closer look at individual preparedness.

The responses to the question about limitations in disseminating information and resources to the community were all quite similar. The greatest limitation was resources, meaning staff and funding. Many of the Emergency Management Directors for the towns are only part time or their primary position is the Fire Chief or Town Manager, therefore their role in emergency management is minor. Being an Emergency Management Director is secondary to many of those in charge so they simply don't have the time or motivation to put forth enough energy and commitment to the position. Towns don't have the money or the support to do all of the programming and work on emergency planning that they would like. It is also difficult to hold accountability to material that's being given out. In terms of individual preparedness, it is often difficult to get people excited to develop a plan or put together a go-bag. Getting residents to actually be pro-active and be receptive to the message MEMA and the local Emergency Management Directors are sending out is another challenge. Reaching the individual household in general is quite difficult. Mike Dunne mentioned that a lot of people have gotten rid of their landline telephones and there is no central repository for cell phones so it is often hard to contact the residents by phone, while going door-to-door is too time consuming, and hoping they see something on the internet is not definite and limits information reception to only those who have access to the internet. Language barriers are also a challenge because there are often so many different groups of people in an area. Some parts of Massachusetts have high concentration of Latinos, Portuguese and Asians who perhaps don't speak English well or at all. Although

brochures and other informational resources are published in several languages, it is still difficult to reach minorities and often times there is an issue of trust. For example, when an outsider who only speaks English enters a community of non-English speakers and attempts to provide emergency preparedness information or tell them what to do, there is a hesitancy to trust the information that outsider is giving.

Another limitation is reaching people of every age. Current trends in technology have led these officials and their organizations to begin using Twitter, Facebook and other social media applications to get information out to the public. However, they cannot depend on these sites because it is mostly for people around the age of 40 and under. Reaching the older population through more conventional strategies still poses a difficulty.

#### *Findings from National Surveys*

After thorough research and responses from each of the respondents from the interviews regarding a dataset organizing who and how many people their information reaches, I came to the conclusion that there is no formal record of what percentage of people in the state the information is reaching or the types of people it reaches. No one has conducted any surveys on individual preparedness for emergencies as it pertains to Massachusetts. However, there are a number of national surveys that have results which align with the responses from the interviewees. I have chosen to discuss some of these findings and zoom out from Massachusetts to address individual preparedness on a national scale.

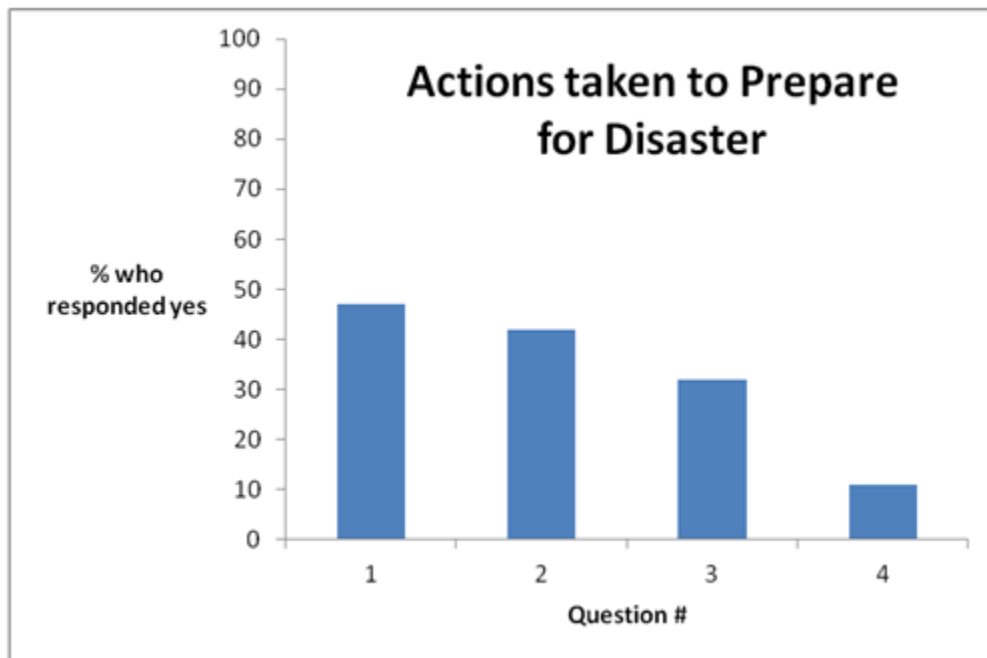
First, the American Red Cross survey will be examined. Some of the barriers that explain why the respondent or another adult in the household have not taken initiative to receive information or training on how to prepare for a disaster included:

- Don't know where to go/Not available
- Not concerned/Not necessary

- Already feel prepared
- Too busy/No time
- Haven't thought/Don't think about it

Many of these answers were evenly dispersed, however the answer with the highest percentage was “did not know where to go to find the information or that it wasn't available to them.” The next question refers to what their household has done specifically to prepare for a disaster. The chart below shows the percent of people who responded that they had done that specific activity in order to prepare.

**Figure 2:** Bar graph displaying the percentage of people who agreed they had done the specific preparedness activity described. (Source: WirthlinWorldwide)



*Question 1.* Has anyone been certified in First Aid or CPR in the past 3 years?

*Question 2.* Has anyone recently put together a disaster or emergency kit (three-day supply of food and water, a first aid kit with family's prescription medications, a battery-powered radio, a flashlight, and extra batteries, etc)?

*Question 3.* Has anyone recently created a family emergency plan (a place where your family would meet if your neighborhood were evacuated and emergency contact information)?

*Question 4.* Household has done all 3.

According to this question, if we based preparedness on first aid and CPR training, having an emergency kit and having a plan with your family, only 11% of Americans surveyed would be considered prepared. However, this doesn't take into account other preparedness strategies like keeping copies of important documents like birth certificate, license, credit cards, etc., in another location, having a go-bag, or other potential preparedness techniques. When asked how important it was that all Americans personally take steps to prepare for a disaster like an earthquake, hurricane, or terrorist attack, an overwhelming 96% said it was important on some level (responded "somewhat important" or "very important"). The survey found that Americans who were least prepared for a disaster were mostly under the age of 35, single, and earning less than \$15,000. The most prepared people live in the Mid-Atlantic and Pacific regions. This correlates with some of the remarks from the officials I interviewed who compared residents of Massachusetts to those of the Carolinas or California when stating that those areas were more prepared. The last question of the survey was one where the respondent had to rate whether or not they agree or disagree with the statement. Below is a chart with the results.

**Figure 3:** Chart explaining the percentage of respondents showing their level of agreement with the given statement. (Source: WirthlinWorldwide. Note: Some statements have been removed.)

<b>Statement</b>	<b>Total Agree</b>	<b>Strongly Agree</b>	<b>Total Disagree</b>
When all Americans are prepared for all types of disasters, it strengthens our national security	<b><u>84</u></b>	58	16
If someone could make it easy for me to be prepared, I'll do it	<b><u>82</u></b>	53	17
It is very unlikely that a catastrophic disaster would occur where I live	40	21	59
If a catastrophic disaster happened, my small steps to prepare would not really help	36	14	62



The most shocking results were that 84% agreed on some level that if every American was prepared for disasters that it would strengthen our national security, yet one of the previous questions proved that very few Americans are even partially prepared. Also, people were comparing the level of difficulty with preparing for a disaster with their likelihood of preparing when 82% provided some level of agreement with the fact that if someone else made it easy for them, then they would prepare.

There are a number of relevant findings regarding perception and preparedness that strengthen previous statements by the interviewees as well as the American Red Cross survey that are in the *Citizen Corps* survey. While half of the respondents reported that they were familiar with alerts and warning systems in place, only 38% said that they were familiar with official sources of public safety information (FEMA, 2009). There were some interesting questions on volunteerism in disaster preparedness. The survey found that 34% of the participants indicated that they had volunteered to assist in a disaster at some point during their life and using this response in conjunction with a number of other answers to survey questions, FEMA and *Citizen Corps* found that individuals who had volunteered to help their community during a disaster were actually more likely to have disaster supplies and a plan for their family, were more willing to prepare for disasters, and had more confidence in their abilities to prepare than those who had not assisted their community (FEMA, 2009). Likewise, individuals who had volunteered to help during a disaster in the past were also more likely to have participated in training programs and to be more prepared (FEMA, 2009). It is important to note the difference between perceived preparedness in comparison to actual preparedness. Overall, FEMA found that suburban respondents were less prepared than the urban respondents, but felt equally confident in their ability to respond during the first 5 minutes of a disaster (FEMA, 2009). Even

those respondents who conveyed that they were prepared were missing some incredibly essential basics of preparedness. For example, one third of the respondents who said they “have been prepared for at least the past six months” didn’t even have a household plan, while almost 80% had not conducted an evacuation drill at home, and 70% were unaware of their community’s evacuation routes (FEMA, 2009). It is these facts that show people feel much more secure and prepared than they are in actuality. So what are their reasons for not preparing? The most common answer was the reliance on emergency responders like fire, police, and emergency personnel and the idea that these groups would be there to assist them so they didn’t feel it was necessary to prepare. Some of the other popular reasons included lack of knowledge and lack of time.

## **Analysis and Implications**

This analysis will take into consideration results from the Massachusetts government interview responses, results of both National surveys, and any research previously conducted. Given the process of dissemination of information, the limitations pointed out by the planners and emergency managers, and the survey responses, what are the implications of the current dissemination model and the perceptions of preparedness? First off, there are many missing links and categories within **Figure 1** that should be included at the local level. Grassroots efforts are essential to successfully spreading information and resources throughout a community. Community and faith-based organizations, local companies, stores and clubs should all be included in the diagram, along with schools. There is no need to depend entirely on the Emergency Management Director given that it is their secondary position and they have limited time and resources. One major disconnect that occurs within the dissemination process is that local planners are not involved enough or at all in this process. Based on research and interviews,

nowhere were town planners or the planning board mentioned. The planning department plays a large role in both the short-term and long-term planning of the area. Planning for a hazard requires a number of short-term changes and initiatives that will have long-term effects. They can also delegate to others and create task forces or focus groups that can take on the majority of the outreach. As the FEMA survey proved, involvement leads to volunteerism which results in greater preparation. If people in the community became part of task forces and volunteer committees, then they would be more involved and therefore more prepared. This type of involvement will pull responsibility away from the director and also from the local police, fire, and emergency officials.

Based on the interviews and surveys, people are not prepared but they think they are. There is a false sense of security, assumptions that others are responsible for their safety, and only have a heightened sense of awareness immediately following a disaster. This false sense of security is because people have a misconception of what preparedness really means and what it entails. The false sense of security also stems from the idea that individuals can depend on outside assistance and that they are not personally responsible for their own preparedness. The interviewees who work for the state and local government all agreed that there is too much reliance on them and community members are not being pro-active enough. The only time citizens are aware and understand the consequences of a disaster is immediately following a big event. So why aren't they preparing? There are a number of common trends from the data that suggest that access to information, time, and difficulty are the main reasons why people are not taking the simple yet critical steps to prepare. Most people agree and understand that preparedness is important, yet they choose not to do it because they have the misconception that

it takes up too much time and money and would be too difficult to find the right information and resources.

Lastly, many of those interviewed had said that there is too much reliance on the government, while the respondents from the surveys said that they need assistance and look to the government for help. There appears to be confusion and neither side wants to take on more responsibility for the preparedness process. This is a major disconnect and is a lack of taking advantage of current resources.

## **Recommendations**

Opportunities and improvements in the way we disseminate information and do local disaster preparedness can arise from the aforementioned limitations and challenges. Changes in communication by emergency managers must occur, types of outreach should be adjusted, and collaboration with nongovernmental organizations is critical. **Involve urban planners.** One major recommendation, which was previously discussed in the analysis, is that urban planners need to be sufficiently involved in the process. Each of the 40 towns in Central Massachusetts has a town planner and/or a planning board or committee. These individuals need to be at the table when discussing community outreach, involvement, and the dissemination process with regards to potential hazards. Planners are concerned with the long-term planning of communities; however, this does not mean that they should not be involved in the short-term plans of dissemination of information and community involvement. They need to be brought to the conversation and establish a working relationship with the local Emergency Management Directors. From there, they can be involved in many of the following recommendations.

*For Emergency Management Directors*

**Remove barriers to individual preparedness.** Individuals' assumption that the local government will take care of them and assist them inhibits individual preparedness because people don't feel they need to personally prepare. Emergency managers need to communicate more realistic expectations of what they can and cannot do, as well as voice and explain the importance of personal responsibilities. **Emphasize household preparedness.** More emphasis needs to be placed on household preparedness rather than community preparedness so that individuals will think about what they personally need to do, instead of thinking that someone else will do it for them. There needs to be a larger appreciation for how critical household plans are as well as knowledge of local community emergency procedures. Many of the respondents, who reported being prepared, were unaware of their town's emergency plans and evacuation routes and had never prepared or practiced a household plan. Recommending that people go online, look at a map, and simply observe the evacuation routes takes little time but saves them from feeling stressed and confused in the event of an evacuation. **Post evacuation routes.** Evacuation routes should be posted at various places throughout the town. **Emphasize the "small stuff."** Discussing an emergency plan with your family is so simple yet so important. Families should know where to meet and how to get in contact with one another, should something happen. Having a brief conversation at dinner solves this potential problem. These are the basic preparedness ideas that need to have greater emphasis placed on them over the actions that require money such as go-bags, back-up generators, and food and water. Although those are also important, people often assume that preparing for a disaster requires money and time, when that is not the case.

*For Local Municipalities*

**Improve adjustments in outreach to households.** As one of the town Emergency Management Directors brought up, many towns have large electronic signs that they place in the middle of the town and most noticeable part of the area when they wish to post important emergency info. Perhaps they can post preparedness suggestion and quick tips on the signs. Mailing out information to each household is another idea. Since many of the interviewees noted the difficulty with reaching people because they do not have the internet or no longer use their cell phone, then the best form of communication is by address. Since it is time consuming to go door-to-door, mailing out a one page preparedness sheet to each household in town is another way to get the information out there.

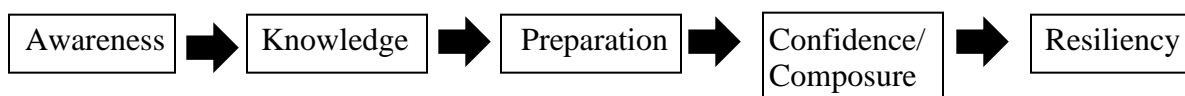
*For Planners and Emergency Management Directors*

**Collaborate with the nongovernment sector.** Since September 11<sup>th</sup>, the government has noticed the importance of collaborating with nongovernment sectors and has placed greater emphasis on grassroots efforts such as *Citizen Corps*. *Citizen Corps* is a national service program under the Department of Homeland Security that aims to prepare people for any security or weather threat, as well as to assist in both the relief and recovery efforts after a natural disaster or terrorist attack. There are local councils all over the country and they are a great way to get people involved and prepared. Communities can establish their own council or look to other organizations to take on similar roles. Regardless, collaboration with local organizations, whether they are disaster focused, faith-based, or clubs, is critical in spreading information and gaining involvement. **Develop a registration of resources.** David Durgan, Emergency Preparedness Coordinator for Northborough explained a registration that Red Cross has in place for neighborhoods to take stock of the supplies and skills within their neighborhoods. For

example, people would list the numerous supplies they have (i.e. snow blowers, generators, boats) as well as the skills (i.e. electrician, plumber, nurse) and all of this information would go into a file which would be made available during an emergency. This registration would allow people to share resources and assist one another during or after a disaster. This type of approach is in line with FEMA’s “whole community” idea that increases individual preparedness and engages members of the community. The registration recognizes the community’s capabilities, which is one of the ideas of *A Whole Community Approach to Emergency Management*. It also recognizes that the government cannot manage every aspect of a disaster alone so it is important to draw on the potential of the members of the community. **View preparedness as a bottom-up model.** The Whole Community approach emphasizes a bottom-up model of organization and management as opposed to a top-down, like I have been discussing. Perhaps a solution to the resource, staffing and funding problems is to alter the way we organize this system and to start at the bottom with grassroots organizing. But how do we empower the individuals of a community? How do we instill that feeling and awareness they have only immediately following a disaster?

**Instill feelings of lasting hazard awareness.** One way to instill that feeling is to repeatedly remind them of what it was like during that event. Getting newspapers to write articles about it, posting about it on social networking sites and bringing it up at local meetings weeks after the storm, tornado, or hurricane will keep it fresh in people’s minds. The diagram below explains how instilling awareness in people can eventually lead to resiliency in disasters.

**Figure 4:** Diagram showing how awareness can lead to disaster resiliency.



When we are constantly talking about weather conditions and potential hazards, people start to think about them. When people are thinking about something, they tend to want to learn more

about it or become educated on it. Lastly, bringing up emergency preparedness at all local meetings will get others who wouldn't normally think about it to incorporate it into their weekly conversation. With the knowledge individuals receive about disasters and proper preparedness strategies, they will begin to prepare themselves. People feel more confident and can keep composure in a time of crisis when they have a plan and know what to do. Another way to maintain their awareness is to constantly provide opportunities for drills and exercises. If local businesses are required to participate in mandatory drills, employees will know what to do during an emergency. In the same way, students at school can partake in drills and then bring that information back home, as previously discussed. Bringing in a professional outsider to speak to the community can provide legitimacy and community members may take warnings and advice for individual preparedness more seriously. The point is that planners need to find a way to empower people and get them involved.

**Enlist the help of individual community leaders.** Often times, planners look to the entire community when they should really focus on taking advantage of those few important individuals who are already leaders within the community. These are the people who can get others involved and do the empowering. As I mentioned in the analysis, task forces or small community groups can form and their main goal can be awareness. Gail Cunningham Coen was a regular woman in her small Connecticut town who took it upon herself to advocate for mitigation strategies within her community. She was enabling others to be prepared. Planners need to work with the Emergency Management Directors to identify individuals like Gail and get them to advocate for individual awareness and preparedness. **Establish a local CERT.** Thousands of individuals in an urban setting take CERT training. CERT stands for Community Emergency Response Teams. Local citizens go through a 10 week training course to get



educated on disaster preparedness and use their skills to assist their community following an event. According to CERT's website, there are not many Central Massachusetts towns with CERT. Establishing and encouraging residents to take the training is another way to get them involved. Volunteers are incredibly valuable, however, towns can also take advantage of the churches and civic organizations that already exist and use those existing organizations to recruit volunteers.

## **Conclusion and Next Steps**

Central Massachusetts has several limitations to their emergency management outreach. Lack of funding and resources as well as staffing can certainly affect the dissemination process, and therefore the amount of people who have taken steps to prepare for a disaster. More research needs to be conducted and further examination on preparedness models and finding out what works should also be completed. Planners and emergency managers need to know more about what motivates people and what sustains their personal preparedness and participation beyond their involvement immediately following a disaster. Regardless of the limitations, Massachusetts emergency managers are doing their best to use all modes of communication to get information out to residents. They are taking advantage of the numerous strategies discussed early in the paper where I provided examples of education, community involvement, and individual participation. Recommendations made to them are also generalized to planners in other locals who are attempting to improve hazard preparedness and the dissemination process.

The greatest ongoing issue facing dissemination of information isn't necessarily resources or funding; it is how to truly empower the individual to take the steps in preparing themselves. A well-known saying goes, "You can lead a horse to the water, but you can't make it drink." Even if planners, local emergency management directors, and emergency managers could

perfect the dissemination model where they knew that every household had received the resources and information about disaster preparedness, there would still be people who would choose not to plan. Awareness doesn't necessarily lead people to take action, but it is certainly a step in the right direction towards preparedness.

Individual responsibility and civic engagement are important ideologies of our nation. Individual preparedness and community involvement are key principles in maintaining resilience in a time of terrorist threats and unwavering climate conditions. Understanding what motivates people and how best to get citizens to be pro-active about their level of preparedness is critical to our survival. Hazards don't need to be disastrous. They can come, we can be ready, and they can leave without causing huge interruptions in our lives and significant losses. Taking the proper steps to involve urban planners, emphasizing the right aspects of preparedness while communicating, changing approaches to outreach, and collaborating with nongovernmental organizations are all ways to improve the dissemination process and better prepare households for potential hazards within Central Massachusetts as well as similar regions throughout the country.

## Appendix

Questions asked to the MEMA and CMRPC employees:

1. Can you please state your full name, occupation and how you came to work for MEMA/CMRPC? (Basically, what is your role and how did you come to this position?)
2. Can you explain the process of how information gets from the top level (MEMA) down to the individual person?
3. What sort of information is given to them and how does it get to them?
4. Does it reach everyone?
  - a. If yes, I will ask if they have data that provides information on who/how they have reached everyone.
  - b. If no, I will still ask for this data, but then ask: Do you have any suggestions for how it could reach more people and are you aware of whom it might be missing?
5. Is there anything in place to ensure that information trickles down all the way from MEMA to the individual household?
6. What do you see as the limitations in disseminating information?
7. I know the CMRPC has developed documents and their own emergency plans - do you collaborate with them at all?
8. In your opinion, do you feel individuals are as involved and prepared as they should be?
9. In your opinion, how involved and active are the local towns in either developing their own plans or participating in meetings and contributing to plans for emergency events?
10. How does MEMA assist local towns or regions in their planning and preparedness and how do you help others in the process below you do their job better?
11. Is there anything we haven't included that you would like to discuss?

Questions asked to the local Emergency Management Directors:

1. How do you get information out to the residents of your town? What sort of outreach do you do?
2. Do you attend the meetings for the Emergency Management Directors, run by the MEMA regional coordinators? What sort of information is given to you at these meetings?
3. Do you hold any trainings, information sessions, or public workshops educating people on preparedness?
4. What do you see as the limitations in disseminating information?
5. In your opinion, do you feel individuals are as involved and prepared as they should be?
6. Is there anything we haven't included that you would like to discuss?

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