# **Expanding Capacity and Capability Inclusion of Participatory Culture, Technology, and Open Data in Crisis Management**

# Host (CDC)

Susan Dugan

# **Moderator (Schatz Publishing)**

Callie Campbell

#### **Presenters**

Heather Blanchard

## Date/Time

August 24, 2011 3:00 pm ET

## **Operator**

Welcome and thank you for standing by. Of participants are in a listen only one. During the answer session he may press start one on your own if you would like to ask a question. I would like to turn the covers over to Ms. Susan Dugan. You may begin.

# **Susan Dugan**

Hey good afternoon, thank you for joining us. As the operator said, I am Susan Dugan. I represent the Health Partners Outreach Team in the Emergency Risk Communications branch, which is located in the Division of Emergency Operations in the Office of Public Health Preparedness and Response here at CDC. Today we have Heather Blanchard with us. She is the co-founder of Crisis Commons. That is a community that connects people and organizations who use open data and technology to innovate crisis management and global development. Heather engages people in thinking about new and social media in new and innovative ways. She has a gift of being able to explain the complex in understandable terms. She has a passion for her work and for connecting people and organizations, in order to do good things. She has spent the past two weeks in California, meeting with such groups as Google, Twitter, Facebook, and others to talk about emergency communication. I have also realized at this point that I have neglected to introduce Callie Campbell, who is with Schatz Publishing and is in charge of the webinar today. So I'm going to stop the introduction just for a brief moment so that Callie can give you instructions on how to use this webinar system. Callie? (00:01:23)

## Callie Campbell

Thank you, Susan. I am just going to walk everybody through the tools that are available. This webinar should last approximately an hour. If you have a question for the presenter, you may use the Q&A button located at the top left portion of your screen. Just type in the question and hit enter to send the question to the present. Questions will be read out loud to the group at the end of the presentation. At the top right-hand side of the screen, you'll see a feedback tool that has a colored square next to it. If you select the drop arrow next to the feedback, you can alert me if you're having trouble hearing it or if you need help. This meeting is being recorded. If you have technical difficulties at any time during this presentation, you may call the technical support line at 1-877-283-7062. Thank you all for coming. I am going to switch this back over to Susan Dugan now and she will be taking over the presentation from here. (00:02:12)

## Susan Dugan

Thank you, Callie. I appreciate that. If you also saw the screen at the very beginning, there is live streaming available for hearing impaired and that link can be found back on the registration page as well. (00:02:26)

Back to introducing Heather Blanchard. We are very pleased to have her. We have had her visiting today on the CDC campus, and have been in continual meetings with very exciting discussions. As I mentioned, she is co-founder of Crisis Commons, but prior to that, she spent seven years at the US Department of Homeland Security and helped launch the first Office of Public Liaison. She was Deputy Director of the Ready Campaign, and served the Assistant Secretary for the private sector within the Secretary's Office of Policy. She fostered new relationships, and encouraged public-private partnerships with owners and operators of information communication technologies, on such issues as incident management, cyber security, social media, and crisis informatics. Recently, Heather provided oral and written testimony in a Senate hearing on understanding the power of social media as a communication tool in the aftermath of disasters. This

testimony can be found online, under the Senate hearings. If you would like a direct link to that, I will be happy to provide it. With that, I would like to introduce Heather Blanchard. (00:03:41)

### **Heather Blanchard**

Thank you so much, Susan and Callie thank you so much for your assistance and everyone, thank you so much today. I really am really privileged to be here, and I really just got out of an incredible meeting just a couple of minutes ago with the situational assessment guys, and some of the GIS folks here at CDC, doing really incredible work, and they are really seeing some of the future of what we are looking at, in regards to how to use open data, and also a new, and actually, not so new, engagement of participatory culture. We will talk a bit about that today. For folks that are on the line, that are on twitter, I am poplifegirl on twitter, and this slide share that you see here is on Slide Share, if you want to go to <a href="https://www.slideshare.com/poplifegirl">www.slideshare.com/poplifegirl</a> you can find it there. Of course you can always e-mail me, I'm happy to provide any kind of follow up in regards to questions, or be able to provide slides back. So, here we go. (00:04:50)

So one of the first things I wanted to talk about, was this whole concept of participatory culture. I was actually -I had the good fortune, just, incredibly, vesterday. I had the good fortune of talking to Henry Jenkins, and he was one of the first folks to coin the term participatory culture. He actually was from MIT Media Lab, and is now at UFC at the Annenberg school there, and he is really kind of talking a lot about how people come together, how they want to, in a way, engage, above and beyond what we may normally think of as institutional partnership and engagement. You know people are really wanting to come together, they want to share. And this is kind of a whole new -he is working on a book right now called. Shareable Media. This kind of gets beyond kind of the viral marketing type of conversation that we have been having before. So, it is a interesting, interesting concept. So I just wanted to start off the conversation by talking a little bit about, what is happening right now. A lot of times, and today is actually a perfect day to talk about it after the earthquake yesterday. You know, what did we see folks doing right after -- as they were coming into the streets of Washington DC and what were they doing? They were looking at their phones. They were looking at wanting to connect with family and loved ones. They were reporting what they saw and they heard. I know personally, on my Facebook, all I had to do was, I am from Washington, DC and ironically I was in LA, and I'm looking at my Facebook and it is filled with people that are sharing, was that an earthquake? And they were checking around to see what other people were sharing, just to see if they thought that they felt the right thing. Because it is such an odd occurrence to have an earthquake on the East Coast. So, you know getting to one of the first bullets, it is just that people want to share and report. They also are very interested in coming together in a way that, you know, we have seen people do before. In faith based communities, and local community groups, people come together to solve civic challenges, they pull together resources, people are doing that online. We are beginning to see that as we have never seen before, utilizing these tools. We are not even talking about just people that may have a certain skill set, we are really wanting to kind of share that there is a lot of people who have many different kinds of skills that can be put to use during a crisis event, and we talk a little bit about that in our testimony, talking about the you know the rise of this whole concept of participatory crisis management. How do you engage others in being able to coordinate and to respond? But then not only during the response mode, but really getting into mitigation and preparedness, and being able to talk through all facets of the emergency management system. So that is just, kind of one of the things. (00:08:14)

Going through just a little bit, with this slide, there are people out there that want to help. And I am fortunate and blessed to be able to represent a whole community of folks that are very interested in being able to support those types of efforts. We are very interested in agencies and response organizations, delivering some kind of requirement that would be helpful for technology volunteers to be able to assist with. So that is something we will talk about a little bit later. Part of what we are really interested in, is that connection between those two groups. The incorporation of ad hoc communities like Crisis Commons. We're not a nonprofit, we are in a sense, a network. We are a collection of people that identify with similar goals and values, and in some respects, we are not a traditional organization by any means, but people do want to come together. There are many technology volunteer communities that are out there today, that do really great work. One of them is called Standby Task Force, another is called the Humanity Road. Those kinds of organizations do a lot of really great work and we are advocating the idea of bringing those people in to be able to kind of coordinate with the official response processes and be able to really kind of help, ultimately, the community on the ground. So we really want to kind of start to look and see how we might be able to do that. (00:10:00) So, just kind of thinking about really kind of where we are going, I would say in the next year or two, is really the right information at the right time allows people to make the right decision at the time. At the end of the day, when you're making a decision in a crisis, you're wanting to have as much information as possible, not only if you're a mom picking your son up at school but if you're a public health official that is wanting to distribute resources in a local area, you want to know what is happening in that area, what the history is, how do you coordinate that information. So it really comes down to this whole concept or right here, right now, data at the right time and place so people can make better decisions and I really want to emphasize this people piece. Technology is a tool and it allows for people to utilize the tool to reach others and possibly to look at data in different ways and to be able to make different types of decisions. I just wanted to share this app that the San Ramon Valley had created and I wanted to focus, not on the app itself but just the idea of the app. That when someone has a heart attack, what's really important

at that very moment is where is like where is the defibrillator, where is that closest to that person and who has skills that can help that person that is close. And so the concept behind this app is that, you can say, there could be a callout that would say, someone is having a heart attack here, and this is where you can find the tool that you will need. And I think that is something again, that is an extreme case of right here, right now. It could be anything like, for example, I moved into my new house about five years ago, and I had to go to the hospital. It wasn't like an emergency, but I just needed to get to the closest hospital. So when you are new to town that may be something that you don't necessarily knowhow to do. So those are the kinds of things that really location-based information, being able to connect that information at the right time and place, and being able to make decisions from that information. (00:12:37)

Part of the challenge is, and there has been a lot of really interesting information that has kind of come out over the last two years about the deluge of data that is growing and growing and I don't think that is going to stop. I think it is only going to get more complex and there will only be more data as things become more wired. As, you know, you have a refrigerator that knows that you like soymilk, and it is going to order soymilk from, you know, the grocery store. So the more sensors that are out there, the more consumer conveniences, there is going to be more and more data. Part of the challenge is, is that there are more, in a way, people problems, rather than technology problems that can inhibit us from being able to utilize that data. Sometimes, you know, we really can't get access to the data. I think access is always an interesting word, because it could be a fence that is put around your system, for example, you have a firewall and you just can't share with another agency. That is pretty typical. There are reasons why there are firewalls, but the other question is that why can't you share between two agencies? Oftentimes, when I worked at Homeland Security, we couldn't share within our own agency. And we were actually an agency that was built to promote information sharing. Those are the kinds of interesting pieces that really get to the heart of being able to engage. Also sometimes it's culture. You know, there may be a culture that sharing may not be as helpful. So we definitely want to respect what kind of information gets shared and when but I think that, you know, this hyper engagement of putting data and information behind a wall, I think it is really hopefully going to go away, I am optimistic on that and I think the data itself would be protected, not the entire dataset that it would belong to, and I think that would be a nice piece to think about in the future. (00:15:02)

A lot of times, people can't use the data. They may lack the technical skills, and I think that is an underutilized fact is that you know, as technology grows, and as adoption increases on a consumers side, sometimes in the workplace, training and education is the first to go when budgets get cut and so when you start looking at people skills and abilities, it is interesting because the rise of consumer adoption is skyrocketing, but some use of data or even tools in the workplace, may not be at that pace. (00:15:45)

As you are looking at The Economist, which I highly recommend reading the article on data deluge, you see a gentleman and data is raining on him and he has an umbrella where he is catching a bit of that data, and he is actually planting a seed and sowing a flower, something new. I think that is something that we are going to see a lot more of, is that when people say there is information overload. Clay Shirky, he wrote a book on Cognitive Surplus, he is a very interesting author, he really says it is really a matter of lack of filters. If you say, I am so overwhelmed with this data, you may have a lack of filters. You also may have a lack of ability to visualize the data, to have very complex datasets, to be able to be, in a way, put it in a picture for you. We were just downstairs, and CDC's GIS folks were showing us some of the work that they did, which was pretty amazing. They took a 1957 paper that had data in it, and created a dynamic dataset. Now the data is broken free out of the PDF document that it was in, and is now that dataset can be downloaded in the public space. That is the kind of stuff that is really fantastic and we really hope to see a lot more of. (00:17:15)

And so once you start going into that world, sometimes, and I don't know if you have experienced this, if you have ever had two Excel spreadsheets and you try to put them together, and they have different categories, part of the challenge there is that they don't mesh together well, right? That's a really kind of a low analogy, but still a simple view. When you're talking about massive amounts of data, that becomes very complex very quickly. So this whole concept of data standards and process is really important. And I think that sometimes those types of coordination efforts, you know, may get pushed off for the things you have to use every day. (00:18:10)

So thinking about, you know, what I like to call "the new deal", but it is really kind of, you know, since the Internet has really been a force in our culture and in our workspace, I mean at the end of the day, the common hub, you know we had a ubiquitous connection with our mobile phones, there's a lot of places now that people are learning how to surf the Internet only through a mobile phone. That is really happening a lot in the developing world. And I think we have a lot to learn from them. There is a huge opportunity to learn from how people are using their phones, how people are utilizing and searching for information, especially during a crisis and we can talk a little bit about that later. (00:19:03)

I really like to say, like we are undergoing a huge societal transformation, where some of the things that may not be apparent during kind of a normal workday, there is a whole concept of trust, and I think that during crisis events, we really see people come together and one of the first things they do is trust each other. It is almost like during crisis events, it is really the best of how people work together and what is really interesting from what we have seen on the technology

volunteer side, is that people come together on a Skype chat and say how can I help? They quickly share that, you know, hey, I am a GIS expert or, hey I write code or hey, I teach school. How can I help? And so, what is really interesting is that people want to self organize and they want to participate and they want to share their skills, and they want to contribute beyond something like giving \$10 on your cell phone. They really want to be able to kind of be part of that experience. I think there's a real value in being able to include them in that experience. I mean if you think about it, if you have 10 people and they are GIS experts and they want to be able to work together to create a map, well I mean, if you counted the number of hours they're working, that is what people pay other people to do. So in some respects, their time is very valuable and I think that a lot of volunteer communities get that, both technical and non-technical. I really feel that during crisis events, there is a real opportunity to create some kind of surge capacity. In two ways, one is that, you know, people can be trained before the event, but you are always going to have people there who just show up and will be what emergency management would call unsolicited volunteers and I think there is a really strong way to be able to utilize their talents and their efforts, and we can talk about that a little bit later. (00:21:20)

The other big piece of the "new deal" is geolocation and I think location in formation is, you're saying that everywhere. I think that is something that we should really be thinking about, you know how do you apply that throughout your own mission? I think that is something we can kind of talk about in the Q&A. But location information, you know at the end of the day, we were just looking at a map and people were wanting to know where IDP camps were. They were wanting to know where they used to have HIV clinics in the 80s, because that means that there were clinicians in the area. It's things that you may not think that a relative data points that, at some point in some level they may be. Those are the kinds of things that we really want to start to look out for. (00:22:10)

So, and I love this slide. I really do. The Economist had two really great articles, one was in February of 2010 and the other was in January of this year. Out of some of those articles, they have a couple charts. One of the charts was really about the amount of global information that will be created. This particular graphic starts to talk about the available storage, which as you can see, we are going to be creating way more information than we are going to have the ability to store. What is interesting about that is that if you apply that to crisis management which is the height of like, information sharing, you can only imagine that it is going to get exponentially more, and it is going to be a lot more complex to be able to kind of sit through the noise and be able to get actual and trend information out of it. So especially when you start thinking about the economic conditions that we are in and that local jurisdiction are really strapped for budgets and I was just in California last week and I was very disappointed to hear that one of the major cities in California had to let their GIS team go and at that point, you just say, they were kind of describing, they said well, the city has all of this GIS equipment but they had to let the staff go. So that really is troubling when you start to see a graphic like this where the data is just skyrocketing and you may not have, and it is much more beyond GIS to be very honest. You may not have that capability and capacity, to be able to make it to create context, and to be able to select the appropriate data layers. Those are the kinds of things, you know, that I personally think about a lot is that, how do we, in these hard economic times, how do we start to be able to provide some kind of additional capability or capacity at the local level, that can really kind of augment those needs? I think looking at the city, there are probably 10 or 15 people that are in the city that might be able to operate those tools and so just kind of thinking about that. McKenzie also had a report that came out in May of this year, and it talked all about big data and it was very interesting because they really kind of started to hone in on the public sector saying, if the public sector is able to take the data and be able to kind of relate it to missions and be able to make better decisions with it, government may be able to act quicker, smarter, and faster and be able to create efficiencies. I think that is a huge opportunity, and there's a lot of innovators that are out there across the emergency management spectrum, and also public health. Unfortunately I have more of an emergency management background that they are creating their own kind of bright spots of innovation. What we would really love to see is all of those bright spots come together and to really kind of start to be that beacon that we all need to be able to kind of look and see and understand best practices and lessons learned, and to build a personal relationship with people that are actually doing it in the field. I think that is a real opportunity.

(00:26:02)

But here, this graphic shows the massive consumer adoption of technology. I don't think we have seen this kind of rapid adoption since really kind of television. At that point, it is like what does this all mean? Not only that, but it's like television did not give people a voice. The level of these tools, they give every single person a voice. I thinking times of crisis, those first voices on the scene, that first person to take a picture of the planes landing on the Hudson, that person that was in the plane in Colorado when it crashed, it was like, oh my God, I was in a plane crash. Or Carrel Pedre who is a local DJ down in Haiti getting the first pictures out and being able to Skype with the international news and saying, this is what happened to my country, to my city, and this is what I am seeing. You are going to see that, we are already seeing that, all over the world. It is changing the dynamic of the Middle East. So I think that, all of the stuff is here to stay. The question is, how are we using it? How are we going to use it for the future? (00:27:15)

Some of the pieces of all of these have looking at it as the totality, this is really building a global sensory network where people want to share what they see and know. During crisis events, we keep seeing that. We keep seeing someone wanting to share it. They are not posting it to a private firewall garden, they are like please share this, please say this. This is what I am seeing. I think that right information, that right picture, that is the picture that is going to have 10 million views. That is the picture that tells the right story at the right time. I think that is something that people are looking at in the crisis response world. It is so great to see like Craig Fugate, you know when something is happening, he looks to his Blackberry and he's going post some information on twitter. So you have these kind of highly you know highly digitally literate leaders like Craig Fugate, like Richard Serino over at FEMA, that are really trying to be able to lead by example. They also see how important it is to incorporate everyone to be part of the process. They talk about whole of community. When you talk about whole of community, the community can provide sensory information. And all that really means is that people are sharing what they see and what they know and you know we always get the argument of, oh it's not validated information. Well, you know, during the first 30 minutes, nobody has validated information. At that point, it really is, and it is not meant to usurp any kind of validation process, but what it is meant to do is provide contact, provide information; local eyes and ears. If an emergency manager is sitting in their ops center and somebody is taking a picture of, you know, a fire down the street, well, he has three or four different people taking pictures and he might have sense of what is going on. And I don't think that is a bad thing. And I think to be honest with you, many emergency managers think that is a good thing. I think that, you know, the challenge that we're going up against really is not a matter of people not thinking things are a good idea, it is really a matter of resources and staffing and also kind of winding out of some of the old ways and being able to say okay, we're going to have to reallocate here. Those are really tough decisions in that I don't really envy anyone that has to make them. But the days of that one lone person sitting in the ops center that might be looking at twitter, really needs to come to a close. I think what we are starting to see is really some rock star type of people, like the folks we were just meeting with here at CDC, that really intrinsically get being able to kind of take the data, make it public, make it into a product that people understand. And I think that the more that we can do that, the more they can share their best practices, that is really where we are going to go in the future. (00:30:33) So thinking about data, it is really interesting, because I was in a city once and they were talking about in the operations center, that they get their city building data from like a trade association. Which is interesting, because, and it is proprietary and it is licensed. To me that is actually kind of sad, because that city today is probably one of the most, it has a huge social media footprint where people are checking in, they're taking pictures, they're providing recommendations on restaurants. There is all kinds of different ways to get that information. So when you think about data, you have to think about the rainbow of sources. A lot of those sources are open. If you think about the Institute, I want to give two examples, so if you want to find all of the library's you can contact the Institute of Museum and Library Services and they will give you where all the libraries are. But, you can also pull up Yelp. When you see where the libraries are, you see them on a map. But you also get feedback like, "I didn't like this library" or "This library is great, it has got Internet." So when you start to think about data sources, there is not just one source. So there is a lot of different ways that people can be able to engage in the data. (00:32:06)

So I just wanted to take a quick moment to talk a little bit about our story at Crisis Commons and talk a little bit about Crisis Camp. Crisis Commons, you know, it really began as a concept as a result of our engagement to support Haiti. I will step you a little bit back. In June of 2009, we held our first Crisis Camp. And what Crisis Camp is, is a bar camp and a bar camp is kind of an un-conference where people come together, they organize on the Internet, they create a registration and people come together. It could be a local library or a local college or even a coffee house, and they want to talk about and to share different types of topics. Our topic was the intersection of technology and crisis management and global development. Where we were looking at crisis as times of crisis, when something like what happened yesterday with the earthquake that's a time, and more of like a place of crisis where it is persistent, so we are really focusing more on the developing world. And what we really found is that there is a lot of similarities, and there are a lot of ways that they can actually learn from each other. During that event, there was a lot of folks that participated like the UN, the World Bank, Google, Microsoft, and Yahoo came. There was a lot of technology volunteer communities that came like Crisis Mappers, Ushahidi representatives were there, Development Seed. There were some really great and interesting folks that were there. What really came out of that was several things but one of the most interesting pieces of it was that it was kind of a lightweight way for people to come together and discuss the issue. We were hoping for like, you know the sharing of best practices, lessons learned, where technology volunteers may be able to help and support, but we were just thinking, let's just begin the dialogue. At the end of the day, I think we can all agree, it really matters about relationships and building relationships at the local level. (00:34:28)

In, you know, cities across the US, they started to want to create Crisis Camps in their own town to connect their own local emergency management community and that would include the weather folks, public health, fire, police, emergency services with the technology communities that exist. It could be like there are so many different types of community groups, you could have a Ruby developer group, a social media club, you can have a bar camp Community. Every city has like a Department of Computer Science pretty much, so you have this wealth of resources both skilled and almost like

this infrastructure type of resources. And so we really thought that was a great idea. So cities started to think about doing that. Philadelphia had a camp that October. And then Haiti happened. Within 24 hours of the Haiti earthquake we had a conference call and a meeting talking a little bit about, like how can we help? We just were like, let's create a Crisis Camp, that Saturday. So within four days, we created a Crisis Camp in Washington DC, in Silicon Valley. By that Saturday, three other cities joined us for that weekend, fourteen other cities wanted to join the next weekend. Within 15 weeks about, there were 62 events in about eight different countries and 32 different cities. It just ended up being this type of format that people can answer the call to action and can show up physically in a place and can work together collaboratively with people they actually don't even know. But they are there for a common purpose. So we did not really realize that we were going to set out to create a movement, but that is what that time period ended up being. (00:36:30)

And so as a result of that, there were some really great successes. So, we figured out that if you have a really strong project manager like someone that comes in with a strong project definition that volunteers can execute. So we had, there's a non-profit called Invenio that came to crisis camp in DC and said look, we need to extend long-distance WiFi in Port-au-Prince. We have these bogga routers. Are there any firmware developers? And what ended up happening was, there were like ten of them, they raised their hand, they got in a group, they created the solution. That night they were testing California, forty eight hours later, that long-distance Wi-Fi was connecting SOS Children and the ICRC at distances of six and 9 kilometers. That is the kind of like magic that can really happen, when you have people working together in a physical stage that they have a project manager that knows the project well, and they have a specific problem definition. That is something that went really well. (00:37:42)

Another piece that went really well is the ability to support, in a way, provide search capacity for existing communities that are out there. So there is a lot of really great communities that want to help, and what we did was say okay, volunteers, please go work on their project. So, that could be anybody from like Open Street Map that helped create the first spatial map of Port-au-Prince after the disaster, and they have thousands of volunteers all over the world and they do fantastic work, and to Sahana Foundation which is an open-source disaster management system. What we wanted to do was be able to provide, if people wanted or needed help and people were coming to Crisis Camp, we wanted to, in a way, act as a compass, for those projects. (00:38:36)

So that was really an incredible experience. We actually came together last summer and wrote a after action report. Part of the after action report really talked about the need for project management and the need for pre-existing relationships. I'm sure we have all heard that before and then also the need to make those connections and to develop problem definitions that could be developed before the event or there is a point of contact where we could be able to filter those problem definitions to people that are interested in working on them. So, I mean, you know, as a result of all of that, this whole concept of developing Crisis Commons kind of came up where there could be a group of people that could shepherd these ideas and be able to provide support for our Crisis Camp during study state. You know we are still working on that concept today. There is a lot of people that participate on that in our community. We are an all volunteer community, and we're looking forward to kind of seeing how this, what this looks like in the future. Because we know that we were a year and a half ago is very different than where we are today.

(00:40:10)

As I said, we kind of learned a lot. We also kind of learned that during disasters, it is an opportunity to innovate, but we also really realized that you can't deploy technology in the middle of the crisis either. People don't know how to use it, or they have never heard of it before or they don't know who you are. It is really kind of not the best time to do that. I think we have heard that and want to be able to make those connections beforehand. We learned that in every crisis there will always be a group of people that are interested. A lot of that is the Diaspora community, people that care that have family or are from the area or have some kind of connection to the area. And we kind of termed this as the crisis crowd, they want to participate, they want to help and they want to do something other than donate money. I think this is a real opportunity to galvanize, you know, that willingness to be supportive. The other thing is, there is a real opportunity to really help existing programs. There are so many great communities that are already out there, there is no need to reinvent the wheel, and it's just like, how do we support those great things? And then of course at the end of the day, we all want real requirements that are coming from the field. I think that any volunteer would rather work on a requirement coming from like the CDC or Red Cross than, you know, this is what Heather Blanchard thinks. So I think that, in a way, verified that requirements is something that we are very much interested in. (00:41:48)

So, I talked a little bit about the potential technology volunteers and now I want to make this a little bit shorter, but if you look up at Open Street Map, there is an entire amazing community that is out there that anyone can join. We really think that they do great work. One of the interesting examples of the use of volunteers during Haiti was that World Bank coordinated with this engineering group called GEO-CAN and they were actually able to create preliminary damage assessments of the area using new satellite imagery. I think that is something that has a real potential. Some might show that during the Gulf Coast oil spill, we really wanted, and we know there was a ton of imagery taken of the Gulf Coast, but what we really wanted to do was to create this thing called, where volunteers would be able to watch a certain

stretch of beach, basically a certain section of a geolocation, and they would frequently get tiles of imagery which they would look at and watch. That imagery might be updated once a week or twice a week. Maybe there is a tweet that comes in that hits that spot and they're able to update it. So that is kind of a big idea that we had. We also had a lot of really interesting lessons from the Japan earthquake that I will talk about in a couple minutes. (00:43:33) At the end of the day, from the conversation I just had right now, data is the key. It is really not about the platforms. People like to get into platform wars like, it is proprietary, it is open-source, at the end of the day it is about the data. And can the data be, I am more concerned if the data is open or closed. You can put the same data on an open-source platform that you can on a proprietary. What ends up happening is that, people tend to have the mentality of, we have to use, we're going to build this platform. Instead of looking at it like, well what kind of data to we need? And really becoming more platform agnostic is really an opportunity. Here, we found that there's a lot of people that, there are tools that are just blocked from their system, because of some security reasons. A lot of times there is only one person that does it. There is little focus on preparedness, like preparing for what you can expect. Sometimes, just the process of getting things verified, we were just talking about that earlier. You know, that could really slow things down when you really need to ramp things up. I think, again, I have not really talked a lot about social media because I am really more interested in the data that is behind social media and at the end of the day, social media is information that can be turned into data. I think that is something to think kind of about. (00:45:20)

So a little bit about, just a glimpse of, what we did during Japan. The United Nations has an office for the coordination of humanitarian affairs, and they kind of coordinate across the culture system. And we have been talking with them about, you know how do volunteers engage with them, and how can we supportive. During the Japanese earthquake, we were talking with them and saying, you know, we know that we are not going to get anything, we don't have a local presence in Japan. We had not had a crisis camp there. And we also knew that they have a robust emergency management system. We were not sure of how we would have been helpful. What we ended up doing is talking to the UN and saying, is there something that we can do to kind of support you in case you guys are deployed? And they had just come up with a new piece of guidance called the common operational datasets. I don't want to delve too down into this but if you're looking at the slide, you can see that they are creating a dataset on a humanitarian profile and it would kind of have information like, if people were refugees or if they were injured or missing. There are population statistics. This is a lot of data that is publicly available. What they said was, why don't you go to see if you can find a lot of that data. You can maybe create some kind of data profile. That is actually what we did. (00:47:08) So, Crisis Commons has a wiki. If you go to our website atCrisisCommons.org and click on the wiki you can see, wiki's are not100% perfect, but this is really actually just the platform that we decided to build this open data profile. When we started building it, it just really kind of became apparent that there is so much more data that is out there than what they were asking for. The other thing is, what they were asking for it is not what the public was really interested in. (00:47:44)

So, we learned a lot from Japan. The main thing we learned is that there were three, kind of, layers of data that were being asked for in different ways. So the first layer really is the layer that they originally requested us to be able to find. So that is like population boundary data, transportation and route data. These are typical GIS types of functions and Japan is a very robust, you know, technology community. So we knew that the information was out there somewhere. There was this need for existing data, and a way to be able to layer other pieces of crisis specific upon. Then we saw that in the public there is really a need for status information, which is really about community indicators. Is the power on? Is the telecommunications working? There was this interesting -Net Hope had asked us to figure out, if there were any communications maps? Of course they were all in PDF and could they be like, some other kind of format? But you know, what was interesting is that we started trying to figure out, where could we -how can we figure out where there was cell phone service and where there wasn't. And then we had this idea of being able to kind of take fire hose data like say of twitter or Mitzi or some other kind of social network and kind of work backwards and where people were not talking, that's probably where there wasn't either power or connectivity. So those are the kinds of critical thinking, interesting types of ways to get to the same end. And so, that really ended up being a matter of finding these community indicators. And it is not just the community that wants to know them. You have a lot of agencies that want to know, should I send this car on this road to do X? That may not be a part of the official response process so it ends up being kind of a piece there. (00:49:59)

Then we see like what really has been in the news, is the crisis information. It is really specific to the event itself. That is really what you saw yesterday. People are self-reporting, I am okay, I am looking at the Washington Monument and there's a helicopter flying around it. There are people that -there is a 15 minute wait to get on the Metro, so they are trying to share bits and pieces of information about what is going on around them and then there is a real opportunity to, and you've seen a lot of great organizations do this, like Family Taskforce and Community Road, is to be able to aggregate that data and to almost be able to tell a story from it. So a lot of times during crisis events, it's the crisis specific data that people are focusing on. Not the other two sets and I think there is a real opportunity to kind of blend it all together because the people that are coordinating some of that specific crisis information really could – would be helpful to have some of the population and boundary information to provide contacts. (00:51:09) Again, I talked a little bit about this, we just think that

there was another good example that somebody was creating lists of where you could charge your mobile phone. It was just a list of addresses. So, what folks did at UCLA was take that list and be able to geolocate those addresses and put those addresses on a map, making that information more mobile. So it is not just enough to like say, I have a website, and it has a list of information. But if you were actually to make that information more location specific, in a way that you can see it on a map, I think that ends up being the last mile. And it's not just about a map, it is making it in a way that is mobile friendly. That could be anything from being able to text a short code, and it text you back where the closest hospital is, or it could be weather information that gives you not only hey, there's a tornado, this is what you need to do, but not pointing to a link because during a crisis event you can't pull up the web. So those are the kinds of things to think about. (00:52:28)

Just a couple of quick observations. We were talking about this with the Embed Program, a lot of people think that okay, we're going to develop a platform and expect people to come to them, but what people are looking to do is to play in and open data space. People want to find other folks that have data and want to be able to coordinate with them. I think that is a real opportunity. I am here because there's a lot technology volunteers that want to help, and how can there be specific requirements that could really help them. So those are the kinds of things that we think about. So we have some recommendations to the Congress. Feel free to go on our website, we have all that information, it's CrisisCommons.org and the blog post is talking about participatory crisis management and it has all of our great contributions there. (00:53:28)

Just kind of thinking about, going back to one of the first things I was saying, this whole concept of participatory culture. It is almost like there are ways to let parts of that in, not only to your organization, but for your organization to actually use some of the methodologies that people just kind of a innately know how to do. Like, I want to work with Susan. She likes knitting I like knitting, we are going to hang out online and have a chat room about it. But the thing about it is, if Susan and I were in the same organization, would we have that conversation? Would we be able to have that open space to share that information to create those relationships before the event? I think that is really important bringing some of those pieces together. I also think that taking about the future work, you will have to plan for people that don't have pre-existing engagements but have an ability to compass them. There is going to be a lot of things that are going to be location agnostic. People will be able to participate no matter where they are, they don't have to be in Atlanta, they can be anywhere. There is a lot of emphasis on skills and collaboration. There is a lot of value that could be had with compassing kind of nontraditional resources such as volunteers. And then again throughout this entire presentation, I really have not talked about social media like, social media is going to be the best thing since sliced bread. The thing is, social media is definitely a term of today. But what we are talking about is the information that social media provides, and how that information during crisis events, especially since we're talking about that, can be derived into data that can help provide augmented situation awareness for the response agencies, and also more importantly, can help communities be able to make better decisions about, should they stay or should they go, checking on their coworkers and loved ones, getting information that they need to make decisions. I think at the end of the day we are in a transformative time, and we are literally transforming the way that we communicate. I don't know about you, I text a lot with my mom, I don't think that three years ago my mom would have ever text messaged me, ever! Now in the morning she will send me a text message and before I spoke at the Red Cross one time she said, dress nice! So it's funny because you use these tools in everyday, but during a disaster, that is literally the most important time that people need to know how to use them. I think what we saw yesterday is that people are using them, but do we really know how to kind of direct their use, to import the information from that use, and to allow for everyone to make better decisions. I think at the end of the day, we are really looking to help support that. I know Crisis Commons is an all volunteer community. Sometimes we don't have the capacity to do certain things, but we definitely are very open to facilitating these types of discussions. (00:56:58). So, I appreciate Susan for having me here at CDC, and I would be more than happy to answer any questions.

#### Callie Campbell

Ok, I just want to remind everybody, to ask a question of the presenter please go to the Q&A section at the top, left portion of your screen. Type in your question there. We are also taking questions over the audio line, and the operator will be here shortly to discuss how to do that.

# **Operator**

Thank you. At this time we will begin the question-and-answer session. To ask a question over the audio please press star, one and please record your name when prompted. That is star, one, and record your name. At any time to withdraw your question, please press star, two. Once again to ask your question its star, one. One moment please. (00:57:46)

#### Susan Dugan

Callie, are there any questions from the webinar crowd?

#### Callie Campbell

There are no questions at this time.

## **Heather Blanchard**

Well, I am more than happy to answer any questions online. It's Heather@crisiscommons.org. Or you can find me on twitter atpoplifegirl.

## Susan Dugan

And we will give it just a few more moments. We have a lot of people still on the line. We have taken the majority of time for the presentation which I really appreciate Heather's time and information. And operator do you have any questions at this time?

## **Operator**

I show no questions at this time.

## Susan Dugan

Callie, do you have anything on the webinar end?

# **Callie Campbell**

Yes, we just got one. We have a question regarding H1N1. Was Crisis Commons able to facilitate help for people finding vaccine?

## Susan Dugan

I'm sorry, it was hard to hear the question. Could you restate that?

# **Callie Campbell**

I'm sorry, yes. She has a question regarding a H1N1. She wants to know, was Crisis Commons able to facilitate help for people finding a vaccine?

#### **Heather Blanchard**

No, that was actually before our time. We started in 2009, the middle of 2009, and we did not participate in H1N1. In fact, this is very much the beginning of our participation in public health. (00:59:23)

## Susan Dugan

And I'm not certain but perhaps the questioner could clarify if they're talking about current vaccine availability? I believe the answer is still going to be that Crisis Commons has not engaged in that.

### **Heather Blanchard**

No. This is really kind of, over the last three or four months, is the beginning of our engagement in public health. We are learning.

## Susan Dugan

Are there any other questions at this time?

### Callie Campbell

She says thank you, that's what I was wondering (the questioner). Do we have guestions on the audio line? (01:00:04)

#### Operator

I currently show no questions over the audio.

#### Susan Dugan

Ok. Well Heather has let you know how to contact her, and we thank you again very much for your time today.

This presentation will be archived on the CDC site of the Crisis Emergency Risk Communication, which is CERC. That can be found at <a href="https://www.emergency.cdc.gov/CERC">www.emergency.cdc.gov/CERC</a>.

Thank you all for joining us, and Callie, do you have any more instructions to leave the audience with?

# **Callie Campbell**

Yes, we are putting up a poll right now. If you have additional people that joined you in this call today, please let us know so we can get more accurate count for our webinar.

## **Heather Blanchard**

Great. Well thank you so much.

# **Susan Dugan**

Thank you all. (01:01:05)

# **Operator**

That concludes today's conference, thank you for participating, you may disconnect at this time.