

**2010 Homeland Security S&T Summit
South Central Region
LIVE INTERACTIVE WEBCAST
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PANEL: "The Role of S&T in Natural Disasters"

Michael Dunaway

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"Three Resilience Parables: A Federal Perspective"

MARY HANSON

Next is Michael Dunaway DHS S&T Human factors and social sciences division. One of the things is resilience and specifically community resilience. His title is three reasons parable's. He will give the federal perspective and he will be followed by a speaker that will join as remotely from his snowed in home. Are you ready with your slides? Okay.

MICHAEL DUNAWAY

Good morning to all of you. I am Michael Dunaway and I am with the human factors and behavioral sciences division. My area of responsibility as a Program Manager reasons projects. What I want to do is talk about something that was the first statements made by Brad and reinforced by Ferranti in that has to do with partnerships and the significance with them, on the one hand, and what you'll learn and what you know at the local and regional level in managing the kinds of disasters and response to initiatives that you have to take on a daily basis. What I will talk about is basically three projects that the Department of Home insecurity has now that I manage in committee resilience and I will put them in a context of things that we have learned from your efforts at the local level pit that is why these are called parables and a parable is a story that teaches a lesson. What we are trying to do as S&T is understand what your needs are and requirements are for operations and find the signs and technology operations that would benefit your ability to respond to those of that is the goal here and I will be fairly click on this here is the story from the mayor of Gulfport, Mississippi. This was a man named Brent who was elected mayor seven weeks between hurricane Katrina made landfall. The day after that he was sworn into office he had to issue a state of emergency warning for his county because as you call there was a tropical storms, indeed, that preceded Katrina but about five weeks. He had to have a state of emergency for his county for his city and he had never done that and did not know what to say. In fact, he said, was supposed to stand in the courthouse steps and tell everybody to leave? He did not have any training in did not know the fundamentals of Emergency management. He had no practical training in one of the most critical responsibilities of his office and that is to protect the lives of the citizens in his area. He to went on to say that what on to save him -- overlooked the fact by the way seven weeks later he had to evacuate the whole city and county in the face of perking Katrina with no practical experience except for the warning that he gave a few weeks before.

So was a man and his community was by virtue of the election process -- the what saved him, he knew the location of every church, every preacher, hospitals, and dental clinics, medical clinics, locations of bridges and neighborhoods that had evacuation routes across the bridges. He knew all of the civic leaders, fire chief, police chiefs and that local knowledge is what saved him. But he had no formal training in how to execute his responsibilities. So this particular project that you see on the left-hand side. The two photographs are photographs of Gulfport, Mississippi immediately after Katrina. We have a project that we're just launching that have been underway for a couple weeks that is focused on developing effective risk communications for explosive devices pick you cannot imagine in the mirror in the local town that is suspected the month susceptible to routine hurricanes does not have initial training and extrapolate that to the problem of explosive devices and what we're not teaching on a broad scale in this nation for our public administrators and publicly Gerson and civic leaders about how they should talk to their publics in the event that they haven't improvised explosive device attack or we have a national campaign. We are working also with our European allies on this and we have one researcher who was working with the European Union over what they have learned over the past few years. We will research what is done right now in this country to train public officials specifically at the mayor and County Executive level for both elementary -- I should Nessie elementary, fundamental emergency procedures and how to issue effective for earnings to the public so they know how to see what the public needs to hear in order to move ahead. This is one project that we're doing right now that relate strictly to the experience of this maker of Gulfport. This has been quoted in the number of newspapers nationally. This

is the Village de l'Est. It is a very high proportion of their population does not speak English and many of them are forced first generation. Witness the fact with in two years after Hurricane Katrina they have 90% of their community restored which is to say the school systems, clinics, commercial institutions, cafes, restaurants, all of eight, up to 90% while the rest of New Orleans was only about a 30% restoration rate. The reason that they could do this is they have a tight community structure and they were tightly bound and they had a very close social network paid one of the projects that relates to this experience, it is not an outgrowth but relates to the experience that we're to read right now is to develop a high Fidelity networking System that could be used by public administrators, city planners, emergency managers at the local level to map their civic infrastructure the way that we can currently do the infrastructure. Over here you see the diagram on the nominal city chart that does not make sense because you cannot read it from here. But if you look at the physical infrastructure geography, terrain, physical infrastructure and the disaster zone what we cannot do right now is we cannot insert in that diagram with the sick and the structure looks like. That is the goal of this program so that we can give communities the ability to understand the proximity of their communities, perhaps a need to critical pieces of infrastructure. Their vulnerability of how the social structure is laid out in the community. And this is actually my favorite one. This is a great one. You remember the wild fires in 2003, 2007 in Southern, California. There was a particular county in San Bernardino that calls itself the rim of the world. This particular community had a graduate of a community college, a guy named Scott and I have talked to him a couple times. He formed a community network website and it was called rimoftheworld.net and he posted weather

reports and said the announcement. During these fires he would take a feed from the fire departments and police departments on evacuation orders that were issued and he was taking feed directly from the citizens providing the photographs on cell phones and sending that information in posting it on his website. I talked to one senior leader of a Fire Department who was managing one of these buyers and they went into the neighborhood to evacuate this area. All the citizens have left already in a dance of the warning. The reason they did is because they were all monitoring this website. So this young guy at the time was about 25 years old was at the center of the warning and alert system for his full committee. So one of these tips we have and we ran out is to capture next generation is communications, the kinds of initiatives that this gentleman has done in his own community. Figure out what we're going to do with not simply miscommunications coming down but misinformation coming up from local population and how we are going to deal with that. Finally I want to make one mention of our poster presentation later on. I have a student from Texas A&M University. Can you raise your hand? I told her I would put her on the spot pitchy will give a poster presentation on the project to analyze six and a 40,000 telephone calls that came over the Texas 211 system during the evacuation of Hurricane Katrina and Rita. They're using it as the central database and we would use that as a template for national Operations 211 Systems and she and about 12 graduate since the next didn't have been analyzing these telephone calls over the last year -- graduate students have been analyzing these telephone calls over the last year so we hope to hear from her and get a chance to talk.