University of Houston Oral History of Houston Project

Historically Speaking: Houston's Helping Hand: Remembering Katrina

Speakers:	Dr. Neil Frank, Bill White, Dr. David Persse, Diana Rodriguez, Joe Pratt, Debbie Harwell, Ann Weisgarber
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Abstract:

After the 1900 Storm, a Galveston dairy farmer said, "One touch of nature makes the whole world kin." That proved true in what many consider Houston's finest hour – the city's humanitarian response to Hurricane Katrina ten years ago. This panel explores past storms and the massive organizational effort to provide relief to hundreds of thousands of Katrina evacuees.

Ann Weisgarber discusses her second novel, *The Promise*, which takes place in Galveston during the famed 1900 Storm. She puts into perspective how devastating the storm truly was, pointing out that it remains the deadliest natural disaster in United States history.

Dr. Neil Frank illustrates the strength and devastation of the 1900 Storm and makes comparisons of it to Hurricanes Ike and Katrina. Dr. Frank points out why the current Galveston seawall is constructed at 17 feet, which he adds would be inadequate as a barrier to protect the island from a Category 5 hurricane. He then discusses several potential solutions to the problem.

Former mayor Bill White discusses the response to Katrina from a governmental perspective and details how he helped to manage the response to the catastrophe. He details how Houston's acceptance of Katrina evacuees changed the landscape of the city and offers a personal assessment of where the city's efforts stand in the annals of Houston's history.

Dr. David Persse details the multi-organizational effort that went into providing relief for Katrina evacuees. He explains what methods were used that allowed public workers and volunteers to constantly adapt to the ever-changing and increasingly worse emergency.

Diana Rodriguez discusses the photographs she took of the Katrina disaster, several of which are featured in the Summer 2010 issue of *Houston History*, "Houston's Helping Hand: Remembering Katrina." She also explains her role as a volunteer which she undertook in order to help those in need during the crisis.

JP: Always pleased to see Mayor White here, he's a longtime supporter of Houston's history and it's good to recall one of our shining moments as a city which is the tenth anniversary of the Katrina relief effort. It's pretty amazing when we looked back on it what our city did in a moment of crisis for real-life human beings who were looking for help and not finding almost anywhere else other than Houston. We're housed in the Center for Public History. Marty Melosi is the director for thirty years and the creator and builder of the Center for Public History, and this is the first in what we hope will become a series entitled "Historically Speaking." The title is roughly- oh, it *is* the same as the fifth anniversary issue we put out, *Houston's Helping Hand: Remembering Katrina*. Fifth anniversary magazine was the brainchild of a fine old colleague named Ernesto Valdés who is now no longer with us. He did a lot of the interviews and died before the magazine came out so, in a way, this is a celebration of his life also. We Texans boast and Houstonians boast of our friendliness and our can-do spirit. We sound like Texans brag most of the time, in this case it isn't. Above all, there was compassion on the streets of Houston, which was in short supply in other places for people whose lives had been really torn apart by Katrina. Personally, I've lived in Houston all but ten years of my life. I think that's the proudest moment I've ever had as a Houstonian and not just the leaders who were strong and good and gave good direction, but Houstonians of all walks of life got together and did whatever we could to help people who obviously needed help. I'm proud of the magazine, I'm proud of being able to be a part of things like this, have Betty Chapman, others who help us with the magazine for a long time, of students here- where's the staff? Stand up and expose yourself. Here we go. We have a course called "Houston History" now and a lot of our students in the course become interns. We

have graduate students who are also helping so we're really doing a good job, I think, attracting young people to the study of Houston history and helping them learn how to do it.

DH: I'm Debbie Harwell, I'm the managing editor of the magazine and we're very pleased to be a community partner with the Harris County Library System's Gulf Coast Reads program. Each year, they have a committee that selects a book with a Texas connection and it's enjoyed by readers all across our region, not just in Harris County. Then, libraries and partners like us hold events in October to coordinate with the topics that are in the book. This year, they're holding more than a hundred events related to Ann Weisgarber's book, *The Promise*, which is set in Galveston during the 1900 Storm, hence our hurricane panel. Ann earned her master's degree here at the University of Houston in sociology. She taught at Wharton County Junior College and Alvin Community College before becoming a full-time, award-winning author. This is her second novel and I can tell you that, as a historian, my first impression when I read it was, "Wow, this woman really did her homework!" It wasn't really very long after that that, as a reader, I realized she had totally hooked me in. On that note, I'm very happy to introduce to you, Ann Weisgarber.

AW: Thank you, Dr. Pratt, for the wonderful introduction for the panel and, also, thank you, Debbie, for the introduction as well. Debbie is the person, from what I understand, spearheaded this panel and I think it's pretty remarkable that she managed to get all these people together at one time and one place, so well done, Debbie. Most of all, my thanks go to all of you for being here today. Everybody lives such busy lives, but here you are and thank you so much. And while I have the microphone, I got to say it: Go Astros! They're going to win. As, Debbie said, *The Promise* does take place on Galveston Island outside of the city limits and in an area that, in 1900, was called "Down the Island." The story begins about two weeks before the 1900 Storm,

which was the worst natural disaster in the United States in terms of deaths. The numbers range anywhere from 6,000 to 8,000 to 10,000 people who died on a single day, September 8, 1900. It's hard to imagine such a loss. There were about a thousand people on the mainland who died on that day as well and there were also people who died following the storm from wounds, from stepping on rusty nails, from the cleanup, and from rattlesnake bites. Not that that has anything to do with my book. When I started the idea for the book I realized that very little has been written about the 1900 Storm outside of the city limits. Everything that we read focuses on the East End and the business district. In 1900, down the island, outside of the city limits, was about 43rd Street, if you know where Broadway is. 43rd Street is where the big cemetery is today. Anything past that in 1900 was called "down the island" and was outside the city limits. I figured there had to have been people that lived there even though their stories have not been told. So, as a good researcher, I went, of course, to the only place you can go and that's the Rosenberg Library in Galveston; and I went to the special collections at the Galveston & Texas History Room. I asked the head archivist, Casey Greene, I said "Were people on down the island in 1900," and he had never been asked that question before. So, hot on the trail, he went back into the archives and he found a directory. The citizens of Galveston had put together a directory of where everybody lived and their street addresses, except there were some people who lived in sections one, two, three, four, five, six, and seven. Casey Greene the archivist, because he knows his stuff so well, told me those were people who lived down the island, outside of the city limits. Then, when I had their names, we could go to the 1900 Census which, mercifully, had been collected in June of that year so that we had accounts of who was on the island, at least in June of 1900. With the names of the people from the directory, I could find their occupations in the census and they were dairy farmers, cattle ranchers, fisherman, their employees, and their

families. That gave me the beginning of a book to be able to think about. Hot on the trail, still- and I've just got a few more minutes, I'm hurrying- Casey Greene found another book for me that was written by a Galvestonian that described the West End, or down the island, described the terrain, and I just about fell over when I found the term "sand hills." Down the island there were three rows deep of sand hills- they called them "sand hills" in 1900- and they were anywhere from five to fifteen feet high. As soon as I saw that, I thought, "That would make the people down the island those dairy farmers, fisherman, and cattle ranchers feel like there was a barrier that would protect them against any major storm." At the same time in that book, I found the term "the ridge." The ridge is the highest point- it's an exaggeration, there's not a ridge on Galveston, it's a slight slope- but it's a few feet higher than the rest of the island and through interviews and more research in the archives I discovered that that's where the dairy farmers and the cattle ranchers built their houses and their barns, on the ridge. So, I believed that these people felt that they had two natural barriers at the time of the storm, the ridge and the sand hills, and of course there was no way these people knew that the storm surge was going to be up to fifteen feet. There was no way that these people knew they were not protected. It was devastating. Of the 1200 people in that part of the island, only 300 survived.

JP: We have four very good and different perspectives to help us remember Katrina. I'll introduce them in the order of presentation. Dr. Neil Frank, raised in Kansas, came to Texas. Some parents might wonder why their son might become a meteorologist like mine wonder why I became a historian. In Dr. Frank's case, he was in the Air Force and he lived through three typhoons on Okinawa. That'll get your attention. He came out and got a Ph.D. from Florida State University in meteorology. I think- I don't know this but it sure sounds from reading his past- that he had a very important role in building what we now take for granted as the National

Hurricane Center. Coming right out of his program working in the National Hurricane Center for 25 years, 13 of those as a director. When you read about what the National Hurricane Center was doing in those years, particularly under Dr. Frank's direction, it is very creative work and learning more about hurricanes and learning how to project paths and learning when the time is to say "Get the hell out of dodge," all kinds of things that we didn't quite know. Dr. Frank came to Houston in 1987 and worked for Channel 11, KHOU in Houston, Channel 11 for the next twenty years. I criticize current weather forecasters when storms come because it seems like they're role is to scare us to death and make us afraid of the fences bouncing from the wind or something, which happened during Rita as I remember. Dr. Frank didn't do that. He was an educator for 20 years. I think most of us watched Dr. Frank, certainly when we were already afraid of the weather. He had a soothing presence instead of a scary presence, and you always learned something from his telecasts, something that he knew that he was teaching the world at the time and outside his job, going out and giving lectures and frequently spreading what he knew about hurricanes that the rest of us didn't. So, very interested in his perspective on hurricanes in general. We have Mayor Bill White, he's a San Antonian. We all remember him as the mayor of Houston, I would go out on a limb and say the best mayor I've ever lived through in Houston, 2004 – 2010. He had been under Secretary of Energy before that, his education is Harvard in economics and the Texas Law School, lawyer by training. I think the important thing tonight is to remember what happens, as is clear in Houston that something in New Orleans is coming toward us and that something is people and trouble. Bill White and Judge Echols, Judge Robert Echols of Harris County, took the lead in organizing the effort that many of us took part in in other ways, but the leadership was coming from the top and it was coming swiftly. Mayor White did things like help take the lead in creating and managing refuges in the Astrodome and

George Brown Convention Center and other large buildings that he could find around town to use. He led the programs that we'll talk about it other presentations tonight to feed and house people immediately in trouble. Beyond that, he also setup long-term programs to find jobs, to find job placement, to find educational opportunities in Houston, long-term housing. I think above everything else, though, he set the tone for all of us: This is a crisis and we are going to step forward and deal with it, and I think, more than anything, setting the tone for the city got a lot of buy-in from a lot of people all over the region. For his efforts, he won the 2007 John F. Kennedy Profile in Courage Award. I think it's an award he accepted for all Houstonians as the leader of what amounted to a mass movement to help people. Also, he's always been a supporter of history and said he's now a historian. He just published a book last year called *America's Fiscal Constitution: Its Triumph and Collapse*, well-received, and I hope you're getting more royalties than most historians and academics get. Third is Dr. David Persse. He has been Physician Director of the Houston Fire Department's EMS service since 1996. Mayor White also appointed him in 2007 to the additional responsibilities of Public Health Authority for Houston. In these positions, he's responsible for the medical aspects of Houston's clinical care, quality management, disease control and EMS. These big jobs, hard enough in regular times, become overwhelming almost when the crisis of Katrina hit. Almost everything that had to be done, sooner or later, found Dr. Persse to do it. He was important in creating and coordinating various things such as setting up a place for elderly people at Ellington Field where they could go and get special attention they needed, processing people arriving at the Dome which was chaotic for days, controlling outbreaks of diseases, establishing medical facilities at George R. Brown, which became a very important part of the endeavor, and others too many to note. In the fifth anniversary magazine, both men I've just introduced played a very big role in getting motion

going that other people can build on. Finally, we have Diana Rodriguez, 23 years as Administrative Coordinator for Dr. Persse, plenty to do helping to coordinate anything to do in the aftermath of Katrina. She's worked for HPD EMS for 23 years, she's been a civilian EMT since 2003. Many of the pictures, if not all the photographs you're seeing on posters, came from her camera. She's unofficial photographer for HPD and she really captured in her photographs the human side of both the people who were suffering from Katrina and those of us that tried to help them. So, I'll turn it over to Dr. Frank and we'll just allow you to get up when he's through and march down the line.

NF: In 1900, Isaac Cline I guess would have been near the downtown area, I'm not exactly sure where his house was, but he went through the storm in his house. He mentioned that they had a lull there for a brief period, which tells me that they probably were in the eastern edge of the eye as it went by. And the farms that you mention, or in the west part of the town- I don't know how far this farm was, whether it's two, three, four miles…

AW: About 61st street.

NF: Okay, well, it was a little close 'cause I know they delivered milk every day.

AW: Mhm (affirmative).

NF: And, of course, if- and it seems like to me, I remember you mentioning the floor level being seven feet or maybe-

AW: Five feet.

NF: Five feet, okay.

AW: You're close.

NF: But five feet on top of the ridge, okay. If they were back far enough, I think it's reasonable that the house might have survived. You had that right on and I won't tell you the climax, but the

climax was also a hurricane event or an event associated with hurricanes, which raises an interesting question: What would happen to Galveston Island today if we had a repeat of the 1900 Storm or, even worse than that, a Camille? You know, Camille was a Category 5 before it weakened a little bit as it crossed the coastline, but it was pushing a Category 5 storm surge. Now, the 1900 Storm was a Category 4. A Category 5 will top the seawall. We think the storm surge will be in excess of 20 feet, so the seawall will be topped. Well, I don't have to speculate on what's going to happen, I can show you. All we have to do is look and see what happened on the Bolivar Peninsula after Ike in 2008. Now, you remember Ike? It was an African disturbance and then it strengthened over the Atlantic, and you can see the eye right there. It was a Category 4 storm at one time, then it went through the Caribbean, through Cuba and the islands there, and it weakened some, then it entered the Gulf of Mexico and made landfall at the coast here shortly after midnight on a Saturday, September the 13th. Now, this is a depiction of what the radar pattern looked like so that you can see the clear region. That would be the eye, all right? The conditions in a hurricane are always much more severe in the right side, looking in the direction of motion, than in the left side. And you can see that by looking at the difference in the storm surge. Notice the storm surge over the Bolivar Peninsula was some 15 – 17 feet, could have been 18 feet, and that's very similar to the storm surge that occurred here in the 1900 Storm. That's why the seawall is built at 17 feet. Now, take a look at the difference on Galveston Island, essentially west of the seawall, you can see the storm surge was generally less than 10 feet. So, there was a difference in the height of the storm surge of almost 10 feet between the Galveston Island and what took place on the Bolivar Peninsula. Now, I'm going to show you some pictures, which illustrate, very dramatically, the difference in kind of damager that would cause. Let's start on Galveston Island. We're going to look at some picture from Jamaica Beach, and then

we're going to Pirate's Beach, and then we'll eventually end at Bermuda Beach. Now, take a look at this picture here in Jamaica Beach. Notice that there's three rows of homes before the storm. After the storm, there was only two. So, the four homes right on the coast were washed away. FEMA has an interesting program. If you have a house in the first two rows and it's over 50% damage, then you qualify for a buyout. Well, needless to say, these four homes were gone so they all were bought out. But notice the two houses here that appear. Well, they were also damaged, so all six of those accepted the FEMA buyout. Notice that there's two vacant lots there. Well, the folks in the vacant lot said, "Hey, we now have beachfront property! Let's head down there real quick and build a house." So, they built the two houses there and they do now have beachfront property. Once that property is purchased by FEMA, then it's turned over to Galveston, and so nothing will ever be built there. Now, let's go to Pirate's Beach. You'll notice now the house with the orange roof on it. Incidentally, I've indicated houses that survived by a square. If it's a circle, that means they disappeared. 1, 2, 3 houses ahead of that one, all three of them were totally gone. This is high-end property, incidentally, at Pirate's Beach and it's interesting, in 2014, all of them were vacant. Well, I found out that the two beachfront lot owners decided to accept the FEMA buyout and the folks in the fourth house said, "Boy, we have a great golf view now!" Well, it didn't last very long. (crowd laughter) Big house, 2015, was built right in front of the beautiful view. And the Geotube; there were some plastic tubes that were sold down there numbers of years ago and said, "That's going to protect the property." Well, it didn't do a very good job. That house is totally gone and the second house decided to accept the buyout. Normally, you would expect the house on the beach to experience the most damage. In this case, it was the second that disappeared, and both of them have accepted the buyout. Now, let's go to Bermuda Beach. The house that you see there with the dark roof, it survived Alicia; a

very, very well-built house. As a matter of fact, the family that lived there felt it was hurricane-proof. Well, not quite. Both of those houses are gone and the house that you see with the tan roof, they also accepted the buyout. If you live on Galveston Island, you know the name "Severance." In 2005, a lawyer by the name of "Severance" bought three beachfront houses for rental purposes. If you live on the island, or you're familiar, we had an Open Beach Act at that time, and it was anticipated that the state was going to come along and require all of the people that had beachfront homes there to move them because the vegetation line had moved back ahead of their home. Well, she bought these houses at a pretty decent price and then, in 2006, when they were told that they were going to have to move their houses at their expense, she sued and she won, so the Open Beach Act no longer is in effect down there. Notice her house was damaged. This was a picture taken by Brian Carlin. Notice that hers was the only house that survived there along the beachfront. Well, she sold out her house for $315,000. The price that FEMA paid was the pre-hurricane price. This is Bermuda Beach, actually Spanish Grant, but there's 8 houses there; only 2 survived and all accepted the buyout. So, altogether there were 98 homes on Galveston Island that were totally destroyed. FEMA bought 72 of those. Now, let's compare that with what happened over on the Bolivar Peninsula. You have Crystal Beach, if you go way out to the east end, you have Rollover Pass, and Gilchrist, and then High Island is back a little bit higher. There were 5,000 homes on the Bolivar Peninsula before the storm. 3500 of them were totally destroyed. Notice this big house on the left there. This was owned by a judge out of Port Arthur and there 10 beachfront houses to the east of him. Now, I'm going to change the camera angle a little bit. See that house that's circled there? That's it that you see in the foreground. Notice I've boxed the house there at the background, it did survive, and you can see that there was extensive damage well, well inland, not just beachfront property itself. Most of

those houses have been rebuilt. This is another perspective of that. On the left-hand side, you can see the judge's home and there's the 10 beachfront houses. On the bottom, I've indicated the houses that were destroyed. 45 were destroyed, 22 have been rebuilt. It's interesting to take a look at the house in the lower box. It doesn't look very big, and it wasn't, but it was well-built, so it survived. Now, notice the house that I've circled there. Well, the owners of that house, their house disappeared but they found out that the people ahead of them were willing to sell their lot. So, now they're convinced they've got beachfront property and they've built this big house there, this is a picture of it. Well, it turns out that the lot owner ahead of them decided to resist the FEMA buyout and have built this big house that kind of obstructs their view. Way up in the upper left-hand corner, white house; that was the only one that survived. I counted 115 houses in this picture alone that were destroyed; 89 have been rebuilt. Now, it's interesting that about 150 people stayed on the Bolivar Peninsula rather than evacuate because it was only a Category 2 storm. Well, on Friday they realized they were in real trouble and the Coast Guard evacuated about 75 with helicopter which mean maybe 75 remained on the island. Well, one couple had to abandon their house when it was flooded so they waded in chest-deep water to the church which was on a little higher ground, opened the door, and were greeted by a lion. There was somebody down there that had a little mini-zoo and he took the lion- You never know, Mayor, what you're going to run into in a shelter. But as bad as things were in Crystal Beach, they were even worse in Gilchrist. They were 500 homes there before, only 2 survived that were livable; the house that you see there with the white roof. Now, I'm going to show you a picture that nobody's ever seen. I ran into this about two weeks ago, found out that there was an airline pilot, and used to fly for Braniff. Remember that airline? He has a small airplane, he also had a house just west of Rollover Pass, so he was so concerned about what happened to that that he jumped in the

airplane around noon. The storm was still over the Galveston Bay, the winds were gusting to over 50 miles an hour, and he took off and flew down there and took this picture. The reason you've never seen it is because he violated the no-fly zone to get the picture and he didn't want anyone to find out that he had done that. At this time, this would have been 12 hours after the eye passed, the water was still 6-8 above mean sea level. At the height of the storm, the water was to the top of the pilings here at the Addams' home. This is what the Addams' home looked like before the storm. It's kind of interesting that they had bought a home on this lot prior to Rita, and Rita caused a lot of damage and they found out that the pilings had dry-rotted, so they bulldozed the house down and built it back much stronger. There was a church ahead of them and a couple homes ahead of that, and they survived because they put the floor level, I estimate that it's probably 16 feet above water level and they are back from the beach some, so they did survive. Well, how are they doing today? Well, they bought the two beachfront lots and now they do have beachfront property, and they bought a couple of lots across the street and opened a bar and restaurant. Well, what about Gilchrist? 500 homes there before the storm, only 2 survived, FEMA has bought out 383 of those lots, and so it'll never be the same again. We were down there a couple weeks ago and there's only been 62 houses rebuilt there and the state is threatening to close Rollover Pass. It was interesting that way out, towards High Island, there was a series of 6 homes that survived there, but notice the floor level was 18 feet above sea level so the water ran under those homes. So, what did we learn? Among other things, if you're going to build down there, build high. I think on Galveston Island and also on the Bolivar Peninsula, if you're on the beachfront itself, you have to build you house at 17 feet or the floor at 17 feet. Well, I believe the house on the left is at 17 feet. If that's the case, then the house on the right must be at 30 feet. One of the things they're finding, insurance companies will reduce your rate

if you go higher. I don't know, if you get to 30 feet, maybe the insurance company will pay you. (crowd laughter) But here's the problem: now you're up where the winds are strong. You go way up there, if you don't build that thing very strong, then the wind is going to do a lot of damage. Well, what about the protection for southeast Texas now? I'm particularly concerned about the industrial area at the north end of Galveston Bay. If it was wiped out, it would be not only a national tragedy, but it would also be an international tragedy. Yeah, I'm concerned about the houses on the beach down in Pirate's Beach, but I'm more concerned about the north end of Galveston Bay. One proposal is the "Ike Dike," I think it's rather interesting. Another proposal is to put a hurricane gate halfway up the bay. That might be something to consider also. Now, the question is: what if Katrina had come here? Well, it would be even worse that I showed you in these particular pictures. Two books I'd refer to *After Ike*- there you can see the picture on that- and *Infinite Monster*; these two ladies worked for, I think, the Galveston newspaper and they're excellent books. I assume that you're probably seen those. Okay. You got it. (applause)

BW: It's like old home for me, you know, when I was serving the people here. Then I got used to Dr. Frank, getting up in the morning, get a cup of coffee, and I'd go on this- from about May 1 to early October on the National Hurricane Service- I got pretty good at that. I didn't know much about hurricanes, I got to tell you, before then, but I got some tutoring from some experts. It's something now that I know about that I won't use very much, except to say that I'll learn something every day. One thing I learned today is: I'm not going to build on Galveston beach. And as a sort of, I guess you could say, "fiscal conservative," I'm not so sure I'm thrilled about paying for people who build their houses and take the risk. So, where do I start? I will say something about I did learn something about meteorologists. I read books about hurricanes and natural disasters, I'm a little bit nerdy and like history, and what a great contribution we heard

about today, but there was one *Isaac Storm* that I read when I was a kid and another, *Control of Nature* by John McPhee. Some people don't know about that but I've been blessed to have read it before Katrina hit, and the lesson of that book, a third of the book, was the hubris in thinking that the Mississippi River levees would hold. Dr. Persse, there were people in our Houston Fire Department as part of a Texas task force that were pre-positioned outside of New Orleans before Hurricane Katrina. They were some of the first on the spot. A lot of attention is given to Houstonians who did things in Houston. I just want to say there were rescue mission done by Houston Fire Department that were being done immediately after the storm. But there was a lot of ignorance as well. Because I read these books and knew a few things, I knew there were organizations that had better communications than many of the state and local governments. So, on the Monday morning after Hurricane Katrina hit, when the national news was saying everything was fine because you had reporters in the streets and it looked okay and the heavy wind damage wasn't there, they called the CEO of Shell Oil Company at a refinery facility on the coast and they knew that the levees had broken before I heard it on the national news or from the White House or anybody else. Now, once the levees break, the city becomes uninhabitable. The storm sewers and the water system is down; power lines, you can't get to the power lines that are submerged, some of the transmission lines. So, without power, electricity, clean water, sewage, you have a place but you don't have a habitable city anymore. So, about noon that day, I gathered people around and said first to the senior staff of the city, I said, "Our lives are going to be different in the next 90 days." Already, there were far more people –get this, now, what I'm going to say- there were more people in our metropolitan area that Monday and Tuesday than came from the Superdome and the like. What was happening? Well, see, they had a mandatory evacuation that was late, and it was "late." I'm being candid, you know, Saturday night was too

late. They didn't mobilize the things that we did to help people get out, and so there was a mad scramble, big freeway traffic, some discouraged to get out. So, it was late but a lot of people had been watching it and they were packing hotels and motels from here to Corpus Christi, but most of them were in this area, or with friends and relatives who were in this area, or in the Red Cross shelters, or in shelters that were established in many of the churches throughout this community, ad-hoc shelters because we had a lot of folks here in Houston that had come here from Louisiana, including my wife. There were a vast number of people and shelters before buses started coming, before people started evacuating. Just a note on organization, I'd had some good mentors in life and run some big organizations so I did know one thing: that if you clearly define two or three or four critical tasks, you assign people by name in front of peers to handle that task, and then you check-up and you report back to each other every day. If somebody drops the ball, you substitute somebody new in. If somebody needs an additional resource and they're doing a good job, you give them more resources, keep the responsibilities where they are, then you can move mountains. But in other ways, some people were overwhelmed by the fact we had 200,000 people here. But from a management perspective- which a lot of people in government never look at- I realized that if we had 5 million people in this community, in the metropolitan area, and we divided up the work, we can handle 200,000 people. But it had to transcend government, it had to transcend public organizations, it had to transcend the Red Cross, which is really only setup for about a 72-hour shelter operation. We had to create a virtual organization and we did. There's some long stories I could tell you about that, but that's how we did it. An incredible response; you needed competent organizations. Corporations are pretty competent; I'd call up CEOs at corporations and give them two apartment complexes, get everybody fed. Then, do we got to get them into apartments? 600 apartment owners formed an organization within 10 days

that we convened to divide up apartments. They told us there were 20,000 vacant apartments in the whole metropolitan area. By early December, we had 35,000 apartments that were occupied, normally with about 4 people each. So, that gives you a sense of the magnitude at the peak. So that people would not be… You want to treat people the way you'd like to be treated, and here's the deal: you can't look back. We're judged by them, this Earth, and we should judge ourselves not by what happens to us that we can't control, but how we react to that. And if you have people sitting like FEMA wanted to in a bunch of trailer cities, or one time they wanted to haul people of and put them on a cruise boat, then how can you get kids in school, seek jobs, on with your life? American are pretty hardy. There's some people who come here, their ancestors survived a brutal journey and a slave ship, there are people who come on the tops of railcars from Central America, there's people who have endured quite a bit. If you give people some chance and hope for the future, then human beings can be pretty resilient if you just give them a little chance to live with dignity and respect and not think of themselves as victims. Ken Maddox, who was interviewed here, he had warned me that about a week in, Dr. Persse, a bunch of suicides because of this mass disaster. People have lost everything. Right at first, they'll be in shock and then there will be mass depression. And then he came to me about three weeks later and he said, "Guess what? We had lower than the normal number of suicides," because people were looking at the forward and not looking back, people were helping them so they had a web to sustain them. Finally, where it stands in Houston's history. First, on the natural disaster scale, I got to say, I've had a little learning from- and now a little but more today- but our worst-case scenarios are weather disasters. Katrina was different than anybody had planned for because what happens if another major American city is destroyed and now you're home for a couple hundred thousand people. That's one type of disaster that people didn't think about. Then there's the disaster that

hits us pretty good. Let me just tell you, as Dr. Frank said, the worst case is something that has a lot of rain, a low of power where that northwest eye wall hits right in the ship channel in Galveston Bay so that it hits our heavy industry, really gives a big right hook into the ability of the United States to get gasoline, and add that storm surge push up the bayou system. At the same time, a little slower than Hurricane Ike, so that you get some rains that sit. If we would have had rains sit in Ike, I will tell you, our bayou system was at capacity. If we would have had about 8 or 9 more hours of that, then we would have experienced what happened, in of all places, Louisville and Cincinnati when the storm slowed down and started dumping water. We had mass flooding in the Midwest. We avoided that in Houston, as bad as the wind was, because that storm had such strong winds that it took down 100,000 trees plus, probably took down about a fifth of the big trees in the city, and took the power lines down. We've got to prepare for the future. I also like the comment "don't panic." What you had in the hurricane after- when Hurricane Rita was coming right at us, and it made a turn. It hit a front and that front was like a wall so it made a turn. So it went into the 5% probability case rather than the 50% probability 72 hours out which would have been close to the worst-case. But Ike was pretty bad, but what happened during Hurricane Rita is everybody saw what happened in southern Louisiana and some survey showed that rather than evacuating the mandatory evacuation areas, or as I and Judge Echols said, there's some people, if you can't stand to be without power, like if you're on a heart machine or dialysis or something like that, you need to get where there's going to be power because we could have a big power outage. What we found was a lot of people took every vehicle that they owned, put in all their possessions, got on the road at the same time regardless of whether they were in the storm surge. I hope people remember that, too, because that, too, can cause human suffering. Finally, the real significance of Katrina in Houston's history is, in my view, it has something

very powerful and deep about the image of our city. We were the shining light of a combination of compassion and competence at a time when there was a national failure of competence and leadership. We were here, but let me just tell you that all over the world there were images of what was happening in New Orleans, and at a time when we were projecting so much military power into other countries, trying to remake their societies, we seemed to be unable to get our own citizens off roofs. So, we played a big role that changed our self-image and the image of Houston in the minds of others, but there was something even more basic is that we got people. We still have two of the richest people that were in New Orleans are now living in Houston, they run big companies. We got people from the top of the executive suite to the people who are sweeping the floor which is- you get everybody. You can't do it with stereotypes. It is true that quite a few of the people that were stranded were disproportionately had low incomes and were African Americans, and Houston had been- and I'm stating history, not an opinion- it was a segregationist city with racist leadership for decades of its existence. And then you saw this community where, on the national news, people were just talking about- they were already introducing the race thing- and most Houstonians, they just saw fellow Americans in need. It wasn't just rhetoric, I mean, people acted on their beliefs. Actions are more powerful than words. So, for me, people in Houston as well as Houstonians who had remembered this legacy of our past, it was a very special time when the people of faith were able to put their faith to good work. In a way- I say this, it's in the little book- a lady came up to me in an African-American church afterwards, she said she never thought-she'd thought they'd change the law, but they'd never change beliefs in her lifetime, it would take a few generations. But she saw the outpouring that occurred where people were just trying to help people and it wasn't my people or your people. It

was just a fellow American and- I forget exactly her words- but Houston had grown up.

(audience applause)

DP: Talk about a couple tough acts to follow. Thank you, gentlemen. As I sat, trying to think about what I was going to say, I think I have about two big takeaways from my experience with Katrina and Rita and the others. One is that, when this began for every one of us who's here and everyone that participated in it, it evolved day-to-day. And as it evolved, it grew and it grew and it grew. For those of you who have read the book, in my section there I talk about how, actually the weekend before the storm I had been doing a project in my backyard and I started 5 o'clock Friday and basically went until about 6 o'clock Sunday night that I turned on the news again. I was just working on that project the whole weekend so I was a little bit oblivious. On Friday, there was a storm in the Atlantic on the east coast of Florida and it didn't look too terribly ominous. By Sunday night, the story had changed a whole bunch, and I remember thinking, "Well, it stinks to be in New Orleans," 'cause it looked like it was going to head to New Orleans. Even then I didn't understand, didn't realize what was about to occur. Then I got a call from my counterpart in Public Health from Harris County, Dr. Herminia Palacio, and she was saying that the county judge had spoke with the mayor of New Orleans and had agreed that folks that were in the Superdome, they were going to bring them over here to the Astrodome, we were going to take care of them because problems were developing. Of course, by this time we already knew that problems were developing. So, we had a meeting at Transtar and we sat down and I remember we had a dry erase board, and we were putting up, "Well, we're going to probably need 200 cots. And we're going to probably need 5 ambulances, because some of these people- some- might be sick. And we'll need 3 security guards 24 hours a day. I'm telling you, we're going to need them all day." So, we started laying these plans and it's almost comical how naïve

we were, but the point was that as it grew, we quickly responded, things quickly changed, we quickly ramped up. Here, when it was first just the Houston, Harris County folks, we already worked very closely together and so there's this air of us that when you come into a room and we're going to work on a project, you kind of leave your jersey at the door. You're not Harris County, you're not city of Houston, you leave the jersey at the door, we're one team. As it grew, and more and more agencies, and many of the volunteers in the community, and organizations we hadn't historically worked with, that tone was maintained of "you leave your jersey at the door." The interesting thing that was going on was, and Mayor White touched on this, the atmosphere of how we all have a really big job to do and it is growing and there is a sense that we are going to tackle this. We don't know what's coming, but we are going to tackle whatever comes our way. It became infectious and I sometimes think that that was maybe the mortar between the bricks as we built this house, was that sense that come whatever, we are going to succeed. That was set by the leaders, that tempo was set by the leaders. There were some naysayers, of course, there's always going to be some naysayers but the momentum of the populace of those of us who were trying to respond to this became so overwhelming that the naysayers quickly converted- well, most of them quickly converted their tone. Things would occur that you just couldn't imagine, problems would pop up that were just completely off the radar that we would have to deal with. So, for example, back in Tropical Storm Allison, before Tropical Storm Allison, we had had conversations locally from the medical standpoint that we needed to have a central medical operation center in case there was ever a big disaster that occurred. This is the home of the Texas Medical Center, obviously the largest medical center in the world. It could be its own city- actually, it would be a small state if you talk to the people who run that, the numbers say it would be a small state. Many, many people are employed there

and, more importantly, many, many people get excellent care there. So, if something disastrous from a medical standpoint came to Houston, certainly we'd have the infrastructure to handle it, right? Well, not without planning. So, before Allison, we had had the conversations. Then, when Tropical Storm Allison hit, which is a distant memory for many folks but won't be for me, we lost five hospitals within six hours when Tropical Storm Allison. And when I say, "lost," they lost all their power, they became nonentities in terms of being able to provide care for the community. They became liabilities because with no power and no light in the middle of the night, that meant no life support. So, you had janitors and unit secretaries in ICU squeezing the bag, breathing for somebody in the dark with a flashlight in their mouth, a pen-light in their mouth. You could never imagine that that would ever happen, that's just completely beyond your imagination, yet it did and people immediately responded. So, with Allison, not only did we have immediate minute-to-minute emergency that occurred, but then over the next several days- and did you know it takes at least three or four days to evacuate a hospital? The only reason I know that is because- who would ever think of that, who would ever calculate that, right- because that's what it was. It took that many days for some of the big hospitals in Houston to evacuate, and then it took them six months to get back online. When Katrina hit, we had all these folks coming in, we had the blessing of having infrastructure, we had the blessing of having people who had been through something difficult in the medical arena before, we had the blessing that we had been forced to work together under austere conditions before. Yet, during Katrina, things occurred that you just couldn't imagine, things popped up that you just couldn't imagine. We had to deal with them one at a time, but they had to be dealt with, and one of my other mantras became, "When a problem comes up, we are going to set a plan, and the moment we get done with that plan, you're going to develop a contingency plan for when your plan goes wrong."

Because it invariably does and you are irresponsible if you haven't already thought of the contingency plan for when Plan A derails. The other thing you have to do is you have to understand things about human nature. What is it that motivates people, what are people likely to do. What I've found in my career is that when people are placed in situations of tremendous stress, they tend to do two things. One is: they will act. They will do something, but they're going to choose to do something which, in their mind, is both important and that they are confident they will do well. So, understand that's human nature as you develop your plan that has got to be part of the equation. Don't take people and force them into doing something that is totally foreign to them because they're going to panic and they're going to derail. You're going to lose their comradery and their morale and their ability to do something else. For example, there was one time when we were trying to move a whole bunch of folks and there was a Boy Scout Troop, and it was a Boy Scout Troop of adult men with disabilities- this is during Allison, actually. They went to one of the hospitals and they were going to help. They had in their minds they were going to hand out food to people. Well, there was no food to be handed out but there were adult men and they were strong. In fact, one of the things that they did in this Boy Scout Troop, if you will, is that they went to the gym and they worked out together. Guess what they got to do? They got to carry patients down the stairs. It was something which was important, it was something which was in their scope of practice wheel, it was something that they were able to do, and they felt worthwhile about it. One of my takeaways from all of this is that you can't predict what's going to happen next. When something goes wrong, and some of the other responding agencies were accused of this, is that when something goes wrong and it's not something that you're used to dealing with, it may not be your fault but it is still your responsibility to solve that problem. So, you have to think outside the box and you have to solve

that problem, and you can't let the bureaucratic rules get in your way. "Well, I don't have authorization to do that." Well, you do now, right? I mean, if you don't, something horrible is going to happen. You have to act, you have to step up and act, and people did that. The other thing is that in my career, in my life, I grew up in Buffalo, New York. When I was 17 years old, we got hit by the Blizzard of '77, and I know you all remember that very well. In the Blizzard of '77, we didn't really get that much snow. What happened was on Lake Erie, there was several inches of snow that had accumulated on top of the ice- and this happens every winter across the ice- really what it was is, it wasn't so much a snowstorm as a windstorm. The wind picked up all that snow off of Lake Erie and blew it towards western New York, and when it hit the land and hit the typography, it wound up dumping and making drifts. And we had drifts that were as much as 40 feet deep and I'm not making that up. We had to get snowplows that came; not plows, snow blowers, these machines I've never seen before from way up in Canada where it's on the truck and the blower, which is usually at street level, actually can rise up and basically eat into a mountain of snow. That's what we had to do to get to people's homes, so there's that much snow. I remember, I was a basic EMT and I just started working on the ambulance back then. So, I had worked at that level of just overwhelming "what are we going to do" and you're working 5, 6 days in a row because there's nobody else who can come into work. The ambulances couldn't move much, so you did a lot of taking the stretcher, you and your partner taking the stretcher, and you're carrying it down several blocks to get to somebody and bringing them back. When I was a resident doing my medical training in Los Angeles, there were a couple of earthquakes. What I learned there was, when there's an earthquake and the roads and streets collapse and the overpasses collapse and the hospitals rock and roll and everything gets broken, what's the first thing hospitals run out of? Diapers. The reason they run out of diapers is because they usually get

diapers delivered every day because they take up a lot of space on the shelf and they go through a lot of them. Instead of stockpiling large boxes because it takes up the whole warehouse, they routinely get them every day. So, that's one of the first things that they run out of. Well, you know what goes into diapers, right? You can't have a bunch of babies with lots of diaper content around for very long because that's a health risk, not only to the babies but obviously to everybody in the facility. That's an example of things that happen that you just can't imagine this is going to be a problem, but you have got to solve those problems. We had that here and I think you all should really be proud of your friends and neighbors in this community because what we talk about what Harris County did and what the city of Houston did and what the state of Texas did, really a lot of it was that the people of Houston because it never would have worked without all the volunteers that came, the volunteer effort. The biggest problem with the volunteers was coordinating the volunteers. But you should all be very proud of Houston and I've lived here for 20 years and I plan to be here for the rest of my career, because this is the place where when things go wrong, everybody rolls up their sleeves and gets the job done. Thank you. (crowd applause)

DR: Good evening, everyone. Thank you, distinguished panel: Dr. Frank; Mayor White; Dr. Persse, my boss for twenty years. I want to thank the University of Houston for this great history project and Dr. Debbie Harwell, Dr. Pratt. And, of course, I have to mention *con todo cariño*, "with all my heart," I want to remember fondly Dr. Ernesto Valdés. I'm sure he's enjoying many Mexican pastries in the great beyond. The last time I saw him, I gave him CDs of our photos and I say "our photos" because also Chief Almaguer, who's here in the audience, had some of his photos in there, too, and my Catholic guilt won't let me go on without mentioning that some of the photos may be his. And I got credit for this photo, which is not mine. At any rate, the last

time I saw Ernesto, I tried to call him, make sure he could open up all the CDs with the photos, and then I just couldn't get ahold of him and I finally reached his family and they told me the sad news During that time, our offices at the Houston Fire Department EMS moved and our phone numbers changed, and I really didn't think about the project ever again. I just thought, "Well, he's gone." Well, one morning Dr. Persse came in and said, "Guess what? Some of your pictures are online." So I Googled and sure enough, I found the magazine online. I was so thrilled I called U of H, got some copies and gave them to my family members and said, "I need this at my funeral. This is wonderful." When I spoke with Ernesto, he recorded our conversation and I never imagined that some of our conversation would end up in this book. I certainly don't even feel like I should be up here with these distinguished folks, but I very much appreciate the… On August 31st in 2005, Dr. Persse asked me if I was available to go out to Ellington, and I really didn't know what to expect. During Tropical Storm Allison, if you remember as they mentioned, all those horrible floods. We worked out of Reliant every day and the Army setup a hospital; there was just such a buzz. Basically, we didn't have an iPad at that time, I had a yellow legal pad and my Rolodex and my little flip phone, and we were running phone calls back and forth from his car from wherever. It felt like it was a training for what was happening now with Ellington and with Katrina. That evening, we arrived in Ellington and waited anxiously for those planes to arrive, and I'm sure you've seen the pictures with the mounds of wheelchairs, mounds of stretchers. Really, I don't think anyone knew what to expect. One of those pictures is one of my favorites with the NASA planes in the background and the elderly patients on the gurneys. It's surreal. Chief Almaguer and myself took pictures that day. He helped me climb on a chair and take some pictures. We traveled to the Astrodome when the first buses arrived. You could see the poor people inside desperate to get out, wanting to touch dry ground. That weekend, I

volunteered, it was Labor Day. I'm a salaried employee, I wasn't going to get any overtime. I told my family, "I want to work the yellow lot." I felt like all the other Houstonians that just wanted to do something for these people. When I told people I was working there, they would say, "Oh, you're with those Katrina people." I told them, "You don't understand, these people are so grateful. These people were broken, they had nothing. Some of the children arrived with no shirts on, nothing." We grabbed some teddy bears that we had to put on the ambulances and took them to the George R. Brown to pass them out. I get goosebumps, it was tough. Those evacuees would thank me profusely for a bottle of water and I felt like I didn't do anything to deserve that, especially not in comparison to our HFD, first responders, EMTs, paramedics that were helping the sick and injured. I'm very much a behind-the-scenes person, I very much enjoy taking photographs, I've been very grateful for the experiences that my job has provided, and I've been privileged with a front-row seat to some of the finest work by our Houston firefighters, EMTs, and paramedics, and out medical staff, our doctors, nurses. That also goes to say for the Katrina response. I just want to mention this little baby is 10 years old now. I wish I could meet her again. I have to tell you a little story about her. I asked this family if I could take a picture of their baby if it's okay, I didn't want to intrude. I was very careful, I tried not to take flash photographs of anyone. Tried to respect their privacy but this baby was so cute and they had just come off a yellow school bus sweating, just trying to get clean diapers, formula. The lady was kind of shy and I noticed she was uncomfortable and she finally broke down in tears and said, "It's not my baby. It's my niece's baby and we're going to try to find her at the Astrodome." And I realized they were about to get sent to the George R. Brown, so we quickly got one of the senior captains and I told him, "Look, we've got to get these people right here to the 'Dome, not to the George R. Brown." I'm just hoping all these years that they've reconnected. She's a 10-

year-old little baby now. I want to thank my family and I want to thank my brother, Jesse Vazquez, who's here with his wife, Maria. They drove in from Galveston County and I appreciate you sharing the evening with us and I want to thank him especially for teaching me everything I know about photography with a film camera. He documented some of the black and white photos that have been shown of Hurricane Carla, the aftermath of Carla. I didn't take pictures then, I was like 1. Thank you very much and go Astros! (crowd applause)

Audience Member: Just on a high level, I don't even know who to ask the question, how do you prepare, how do you provide food for masses of people on a high level? And where do the funds come from, City of Houston, Harris County, where do they come from paid for?

BW: Well, I don't know whether this [mic] is on or not but I can tell you.

Audience Member: We can hear you.

BW: First thing I say is that we have Red Cross shelters and we had George R. Brown and the Astrodome, and very quickly, we mobilized and asked for the megachurches, essentially, to take responsibility for food and feeding. We did also call on every- you know, if there was a shortage of food- listen, Walmart, HEB, we got food. We had more of a problem with food in some of the motels where, especially, if people didn't have wheels and they didn't have money. That took a little bit more effort. Once we put out the call to Houstonians to donate stuff, then we had- well, by the end of September we had 10 large industrial warehouses, which were organized with baby formula, diapers, foods, blankets, clothes. We had so much clothes that they would have- I don't want to sound ungenerous- but we could have clothed the state. We wound up having a lot of it later on put up on C I of A's to take to a hurricane-stricken area in northern Pakistan where 60,000 people were homeless and tens of thousands died.

Audience Member: They are residual though?

BW: Yeah, residual. The food wasn't as big of a problem. How do you provide the medical needs for all the people and then how do you get people in housing with electricity and furniture? Those were a little bigger logistical stories. And I'll wind up by saying as we organized this volunteer effort, some of you all may have heard this, as I say it was megachurches and bishops, people who could act and organize large numbers of people. There were some venal food vendors who had contracts for the Astrodome and George R. Brown. One of them won and one of them lost. Let me just say, I told them to sue me because they provide concessions for the games with a markup and I'm cheap. So, this was all donated and FEMA reimbursed it. None of it came out of the city or county taxpayers. But on September the 11th, the Islamic Society of Greater Houston wanted to take responsibility for feeding because they thought it was important in view of what some people who call themselves Muslims did on September 11th that they show that they were there to serve everybody. It was interesting.

Audience Member: (question inaudible)

BW: You want me to- I don't know. I do know that we looked at- I mean, this is a little different topic- but what ought to happen, but there's also vested interests, okay? Don't you find that amazing? Guess what? There are really big hurricanes that go over Japan and you can't drive 400 miles away or 500 miles away. When it comes to the senior centers, in particular geriatric care, people who have assisted living, we ought to have a certain building standard if you're in a storm flood area. That would require a backbone of state officials.

Audience Member (Nimra Haroon): I have a question. Thank you all for coming out here and I don't know who to direct this to, but in the brief planning time that there was to prepare the response to Katrina, are there any other cities that planning committees looked at in terms of a model to implement something of a structure that may have been another state?

BW: Can I do that? No, and the reason is that you never really had a big evacuation of most of one of the largest cities in this country to another city. Dr. Persse said it, the most important thing is- well, let me put it this way. President Eisenhower, both when he was head of the military in Europe in World War II and then as president, he used to have a saying which was, "Planning is indispensable, but plans are worthless." Persse was there at some of these meetings; we did a lot of improvisation, but it was not ill-informed improvisation. If something didn't work, we quickly changed. As he said, you have to have a contingency plan. We didn't have time to do that. We didn't have time to study a bunch of bureaucrats.

DP: Can I add one thing to that? To answer your question, no we didn't. Since then- and we started talking about before Tropical Storm Allison we had talked about having a center for medical operations in case a catastrophe occurred. When Allison hit, we sort of quickly threw something together that sort of matched what our thoughts were, and that's how the 5 hospitals got evacuated. That's how the other hospitals were able to absorb that patient load. That's how they got coordinated because there was lots of, literally thousands, of patients who were in hospitals, there 5 hospitals with each one of them having maybe 200-400 patients each depending on the size of the hospital. So, there was over 1,000 patients that had to get moved and absorbed within the rest of the community. And then again, remember, from day-to-day, just the same rate of health needs was going to continue. So we now, today, have a thing which we call the "CMOC" which is the Catastrophic Medical Operations Center. Between Allison and when Katrina hit, we had sort of put that together. Then when Katrina hit and we had all those folks come in, it really got tested. It got tested even more when Rita came along, and the reason for it was: a), Houston was pretty saturated with new medical cases and we all thought that Rita was going to make a direct hit. So, there was this huge evacuation and, basically, from a medical

standpoint, everything from the South Loop to the coast- all the hospitals, all the nursing homes, all the extended care, all the long-term care facilities, they all evacuated. Then that storm made that hard right and it went into East Texas. First of all, a lot of folks had already evacuated into East Texas where there's not enough infrastructure. When they made that turn, we were fortunate in that there were many DMATs, which are called "Disaster Medical Assistance Team," many of those across the Gulf region between Louisiana and Texas. So, some of them were there and others responded in there, and the state of Texas made what would seem like the logical move of, "We're going to take all the medical needs there and we're going to send them into Houston, the home of the largest medical center in the world and has had good weather and just did a good job with Katrina." What they didn't keep in their equation was that a) we were full and we had evacuated over 2 million folks, but the CMOC was able to manage that because we developed a network across basically half of Texas so that as patients came in- and we saw this at Ellington during the evacuation from New Orleans- a C-5 would land, and this is in the book, and the manifest in that C-5 would be written on a piece of paper. "Patient 1" and a name, "Patient 2" and a name, and you go to Patient 1 and you look at the armband because maybe it's somebody- in fact, they were almost always from nursing homes- some of them could communicate, some of them couldn't. There's a nametag so you know who it is. And you look for the paperwork and there's no paperwork. You don't know their diagnosis, you don't know their medications, you don't know anything about them. Through the CMOC, we were able to take them right from Ellington, get them onto ambulances which had come from across the nation, we had ambulances from 48 states, and get them maybe to some place in Waco, maybe some place in Cleveland, maybe some place in San Angelo, but they only had to make that move one time. The other thing is, this is incredibly difficult on the patients, right? Can you imagine being a nursing home

patient in a flooded nursing home in New Orleans, then you find yourself somehow you get onto a C-130, which if you've ever been on a C-130 is not a very comfortable ride, you land. Lord knows where you are now, and then you get put on an ambulance. Just the emotional stress on these folks. The last thing we want to do is have them bouncing around and not have a plan and not be able to execute the plan. To answer your question- and the other thing that happened then through our conversations was when all the folks were coming in from East Texas, I made a call to Dan Walterman who is the CEO of the Memorial Herman System and I said, "Dan, I need a hospital. This is what's going on, I need a hospital." He said, "Give me 10 minutes, I'll call you back." I knew in that 10 minutes he was calling board members, and then 10 minutes later he called me back and he said, "You've got Memorial Herman Southeast, which is completely empty, there's not a soul there." He says, "I got one administrator, I got a half a dozen doctors, and I think we may be able to get about 10 nurses over there in the next couple of hours," and we started moving. And he said, "Just don't overwhelm us, 'cause I haven't got the people. I'll give you the building, I'm going to give you the keys. In fact, you can land helicopters in the front lot because there's no cars there." And that's, in fact, what we did. Most of those folks that came off of those helicopters, they were actually nursing home folks which needed to actually get into nursing homes, which is where they belong. The flipside of all this long conversation is that there is a thing which is called the Catastrophic Medical Operations Center. There's now two in Texas; one is here in Houston, the other one is in San Antonio. Between the two of them, we cover everything in the entire state, and they now have them in New York and Los Angeles and in a couple of other big cities They looked at what we did and they are trying to replicate them. The key thing to remember, and I'm harping something again is that: a) you can't make up the problems you'll be faced with and b) you have got to solve them.

BW: Let me just say… Could I say… FEMA then went to school on what we did. During the thing I'd convene, we'd have periodic conference calls with all the other mayors in Texas. They would ask how we were handling certain issues and we'd go over that with them, their city managers often it was on the line. And then they changed the federal laws for FEMA after Katrina because the housing program we setup was technically not authorized by federal law and we wanted federal reimbursement. They wound up reimbursing us. They put in extra law, Congress had to pass it, to allow FEMA to do what Houston did in the future.

AW: May I add something? Is this [mic]on, can you hear me?

JP: Yeah, you're good.

AW: It makes me marvel to think about all this planning that you all did. When I was doing research for the 1900 Storm in Galveston, there was absolutely no planning at all at that time period. It never crossed their minds that there could be this kind of hurricane that would hit. So, the city mayor, the Galveston leaders had absolutely no plan in place. The only warning that they had came from Cuba and then Florida. So, the weather bureau raised warning flags on the Strand outside of their buildings and that was all they had to go on. It's remarkable to think about how far we have come to go from nothing. After the 1900 Storm, Houston knew something terrible had happened in Galveston, and the first thing that they did, they loaded barges of ships with barrels of fresh water. They knew that was the number one thing that had to be taken care of and they shipped them immediately to Galveston. Of course, Houston had been hammered pretty hard in the storm as well, and they had to have in the front of these barges men at the front of the ship- my dad was in the navy, he would know what that was called that front of the ship- but they had to have people with long poles to push the bodies aside so they could get to Galveston. But Houston responded in an unbelievable way immediately after that storm bringing water.

Then, on the return boats, they were taking women and children off of the island because they were so sure of disease would immediately break out. Then, Houston somehow filled up barrels with lime and then the people in Galveston were putting lime down in the streets as their way of trying to handle. So, how far we have come. My gosh, it's remarkable.

JP: I hope everyone here has enjoyed this as much as I have and I think we all should give our panelists a thank you. (crowd applause)

End of Interview