Disaster Research Report:  
Studying the 9/11 Waterborne Evacuation  

Volume 2 Issue 1  
August, 2007

Study Nears Completion of Year Two: Over 100 Participants Interviewed

It's difficult for us to believe that nearly two years have passed since start the of the University of Delaware and University of North Texas' study of the waterborne evacuation of Lower Manhattan on 9/11. The research team has received tremendous support from the harbor community. By the end of the summer, we'll have interviewed over 100 people involved in the response or recent planning efforts, and we have received information from many more individuals.

This project examines organizational improvisation and sense-making under conditions of rapid change and urgent needs for decision and action. Moreover, it explores how these organizations are able to coordinate their actions both responsively and productively.

Did you play a role in the waterborne evacuation or participate in the boat-lift of supplies to Manhattan? Are you willing to participate in this study? Contact Tricia Wachtendorf or James Kendra (information on page 4)

To subscribe to this newsletter, email us at twachten@udel.edu. We also post newsletters at the project website: http://copland.udel.edu/~twachten/waterborne_evacuation.html

Photo courtesy and with permission of Jim Sweeney

Funds from the University of Delaware Research Foundation and the National Science foundation have made this study possible, as has the cooperation of the South Street Seaport Museum. Key to our success , however, has been the interest of those who participated first hand in the evacuation. For example, it is through our interviews that we have learned more about the bus transportation process that developed as vessels brought evacuees across the river to New Jersey and other areas in New York City. We are beginning to understand which features of the waterfront facilitated or impeded the ability of vessels to assist others, as well as the various roles different vessels played depending on their particular capabilities. We are learning more about what individual participants drew upon (what kinds of knowledge, experience, information sources) as they improvised their responses that day. Equally important, we are learning about the types of activities or relationships that were extensions of what participants did on a routine basis. As we now, in our third year, begin to look back through the interviews we’ve conducted over the past two years, we look forward to sharing with you many of the findings from this study.

In the meantime, we are pleased to share with you some of the activities we were engaged in since our last newsletter. In this issue, we highlight the accomplishments of
**Cover story continued**

Several student researchers who have worked on the project. In addition to learning from disaster events and communicating our findings, the goal of both UD and UNT is to train the next generation of researchers and practitioners so they are better able to contribute to this field throughout their careers.

**Finally,** if you have an upcoming meeting, activity or event that you think those in the harbor and disaster community would be interested in, please do not hesitate to contact us. We would be happy to include it in our next issue.

**TRAINING THE NEXT GENERATION OF RESEARCHERS AND PRACTITIONERS**

"I am still amazed by the way the harbor community pulled together on 9/11 and successfully evacuated hundreds of thousands of people off of Lower Manhattan. There is so much to learn from their efforts on that day." Lauren Ross, DRC research assistant

Several undergraduate students who played important roles on the project over the past year graduated in May, 2007. Lauren Ross, a political science student who wrote a senior thesis on the impact of Hurricane Katrina, will be attending graduate school at George Washington University’s Department of Sociology with an emphasis on stratification. Brandi Gilbert, a McNair Scholar with a degree in Elementary Education with a minor in Spanish Studies, will attend graduate school in the University of Colorado at Boulder’s Department of Sociology. She will serve as a research assistant at the Natural Hazards Center, working on a project examining preparedness among community and faith based organizations providing services to at-risk populations in the San Francisco Bay area. Caroline Williams earned her degree in anthropology. She will be spending a year working with the New Castle County Emergency Management Agency through the Americorps program. She plans to attend graduate school in fall, 2008 and earn a master’s degree in emergency management. We thank these students for their hard work over the past two years and wish them well as they continue their interest in the disaster and emergency management fields.

---

**SENSE-MAKING DURING THE EVACUATION**

In Kendra and Wachtendorf’s preliminary paper The Waterborne Evacuation of Lower Manhattan on September 11: A Case of Distributed Sensemaking, the authors drew upon Karl Weick’s concept of sensemaking and found that the awareness of the event, of emerging needs, and of necessary action developed into the successful evacuation efforts in part because of a shared knowledge base, an ability to recognize the limits of what others could do, and through the relaxation of rules and introduction of new ways of acting. How individuals responded also depended much on their conception of self-identify (e.g. as a boat operator, as a coordinator, as a first aid provider), on their retrospection (looking back to past experiences and events such as the sinking of the Titanic or personal experiences), on their prospection (their ability to anticipate emerging needs and circumstances), and the way in which they altered the environment leaving cues to others (e.g. cutting down fences and leading to an emergent way to cue and embark passengers.) See the project website for a copy of the preliminary paper:

http://copland.udel.edu/~twachten/waterborne_evacuation.html

---

Photo courtesy and with permission of Jim Sweeney
In April, 2007, Dr. James Kendra presented some of our early findings at the annual meeting of the Association of American Geographers in San Francisco. The extremely detailed geographic knowledge of harbor pilots, boat operators, and others enabled those involved in the evacuation and boatlift to think quickly about alternative docks or places to take on people or stage supplies. This skill was especially important because many areas of the waterfront are not normally equipped to accommodate boats or the embarkation of personnel. Some boats were challenged to tie up because of a lack of cleats and bollards, and had to improvise instead. The evacuation shows that communities, especially coastal communities, should think carefully about their transport systems and maritime infrastructure and how these might be useful in crises as well as during “normal” times.

PRESENTATION AT THE AMERICAN ASSOCIATION OF GEOGRAPHERS MEETING

Deon Pfenning, emergency management student from the University of North Texas, participated in the DRC’s REU site program this summer. The site program, funded by the National Science Foundation, the Department of Defense, and the University of Delaware, is a competitive program that provides undergraduates with an intensive 9-week research training session and works to encourage graduate work in the social sciences of disasters. Deon’s project examines the human capital—or the skills, training, education, and experience—of those who participated in the evacuation efforts and how it may have impacted the roles and activities those individuals undertook. He will be continuing work on his paper, *All Available Skills: The Impact of Human Capital on the Waterborne Evacuations of 9/11* as he completes his senior year at UNT.

To the left: Deon Pfenning and project manager Lynn Letukas examine NY/NJ harbor chart.

UNDERGRADUATE INVOLVEMENT: JEFFREY ENGLE PRESENTS AT REU SYMPOSIUM

UD Undergraduate Jeffrey Engle presented the waterborne project at the University of Delaware Research Foundation’s Research Experience for Undergraduates symposium. A Dean’s Scholar who has developed his own specialized undergraduate program in disaster management, Jeff received funding from the UDRF to work on the project during the summer of 2006 to work on the project. During this time, he transcribed interviews, developed a catalog for the hundreds of documents collected for the project, and attended research training sessions. At the symposium, Jeff had the opportunity to explain the project to Board of Trustees as well as senior administrators at UD. He continues to play an important role on study.

To the right: Engle explains the project to Dr. Benigno Aguirre.

Project Team Members

*Principal Investigators:* Tricia Wachtendorf and James Kendra  
*Senior Personnel:* Jasmin Ruback  
*Researchers:* Lynn Letukas, Brandi Lea, John Barnshaw, and Bethany Brown  
*Undergraduate Research Assistants:* Jeffrey Engle, Caroline Williams, Brandi Gilbert, Lauren Ross, Caroline Bomfim, and Chris Colindres
We would like to thank all those who have taken time to participate in this project. Your contributions have been extremely helpful.

**DID YOU KNOW...?**

Did you know that the Public Entity Risk Institute is a wonderful resource for those interested in disasters, risk, and emergencies from a local government, private sector, or non-profit perspective? Its site includes training material, publications, and other valuable resources, many of which are free to download. For more information, see http://www.riskinstitute.org/peri/

Did you know that the Working Harbor Committee organizes a variety of events and activities? The Mission of the Working Harbor Committee is to strengthen awareness of the working harbor's history and vitality today, and its opportunities for the future. To join the committee or to participate in one of its many tours, children’s programs, or other special harbor programs, see http://workingharbor.com/

Did you know that The New School, located in Manhattan, is hosting a conference on November 1-2, 2007? This conference, *Disasters: Recipes and Remedies*, brings together experts from a variety of fields to discuss key perspectives related to a range of disasters and threats. Presenters include leading experts from across the country, and NYC Fire Commissioner Nicholas Scoppetta will give the keynote address on the evening of the 1st. The event is open to the public. Please visit www.newschool.edu/disasters or email socres@newschool.edu for more information.

**MEET THE RESEARCH CREW: DR. TRICIA WACHTENDORF**

*Dr. Tricia Wachtendorf* is an assistant professor in the Department of Sociology and Criminal Justice and a core faculty member of the Disaster Research Center—the oldest center of its type in the world—at the University of Delaware. Originally from Manitoba, Canada, she developed a keen interest in disaster research during her undergraduate program and her community outreach work with IV drug users and the street population of inner-city Winnipeg. Tricia came to DRC in 1996 serving as a research capacity, completed her master’s and doctoral degrees, and joined the department as a faculty member in 2004 where she teaches classes in disasters and qualitative research methods.

Tricia has extensive experience conducting quick response field work, and has deployed following such major events as the 1997 Red River Flood that impacted American and Canadian communities in the Midwest, the 2004 Indian Ocean Tsunami (when she traveled to India and Sri Lanka), and Hurricane Katrina in 2005 when she studied logistical supply chains. In 2001, she helped lead a quick response team to New York City following the World Trade Center attacks, a project that eventually developed into her dissertation on organizational improvisation. She has studied disaster mitigation and response programs around the country and is particularly interested in the important contributions citizens, the private sector, and community-based groups can make alongside more formal emergency organizations. In July 2006, Tricia and her husband David had a baby girl, to whom she genuinely enjoys reading Maria Kalman’s children's book “Fireboat: The Heroic Adventures of the John J. Harvey.”

Look for future issues to highlight other researchers involved with this study.