

## “Transforming Mitigation Awareness into Action”

RICHBURG, SOUTH CAROLINA • DECEMBER 11, 2013



Wildfire ember intrusion testing in the IBHS Research Center test chamber

On December 11, 2013, the Travelers Institute, the Insurance Institute for Business and Home Safety (IBHS), and the Wharton Risk Management and Decision Processes Center co-hosted “Transforming Mitigation Awareness into Action.” The symposium convened mitigation researchers and insurance professionals at the IBHS Research Center in Richburg, South Carolina, to share perspectives on how mitigation research can be used to educate stakeholders, motivate change, and, ultimately, transform society through public policy and consumer-oriented mitigation initiatives. Attendees also had the opportunity to tour the IBHS facility and hear about the research being conducted there, in addition to viewing wildfire ember intrusion testing in the facility’s large test chamber.

The program began with opening remarks from Ray Farmer, Director of the South Carolina Department of Insurance, who welcomed attendees to the state and gave an overview of what South Carolina is doing to encourage its residents to adopt

mitigation practices. He highlighted the South Carolina Safe Home program, administered by the Department of Insurance, which provides grant money to individual homeowners to make their property more resistant to hurricane and high-wind damage.

The symposium continued with the presentation of two new research papers. Dr. Jeffrey Czajkowski of the Wharton Risk Management and Decision Processes Center gave an overview of his research paper co-authored with Kevin Simmons entitled, “Convective Storm Vulnerability: Quantifying the Role of Effective and Well-Enforced Building Codes in Minimizing Missouri Hail Property Damage.” This research focuses on the notion that in order to reduce losses from natural disasters, effective building codes must not only be in place, but must be properly enforced. Utilizing hail claims data from 2008 to 2010 in the state of Missouri as well as Building Code Effectiveness Grading Schedule (BCEGS®) ratings from the Insurance Services Office, the authors found that a mid-size community of 50,000 people,



Ray Farmer, South Carolina  
Department of Insurance



Dr. Lorilee Medders, Florida  
Catastrophic Storm Risk  
Management Center



Dr. Jeffrey Czajkowski,  
Wharton Risk Management  
and Decision Processes Center



Dr. Howard Kunreuther,  
Wharton Risk Management  
and Decision Processes Center



Debra Ballen, IBHS

which experiences a moderate hail storm, could expect to reduce losses by approximately \$4 million to \$8 million by adopting and enforcing appropriate building codes. A research brief can be found at [opim.wharton.upenn.edu/risk/library/WRCib2013e\\_Hail\\_BCEGS.pdf](http://opim.wharton.upenn.edu/risk/library/WRCib2013e_Hail_BCEGS.pdf). The paper is forthcoming in the journal *Land Economics*.

Dr. Lorilee Medders, Director of the Florida Catastrophic Storm Risk Management Center at Florida State University, gave a preview of her latest research, “Wildfire & Wind: Multi-Peril Evidence on the Risk and Mitigation Perceptions of Homeowners in 12 U.S. Communities,” sponsored by the Insurance Research Council (IRC). She surveyed more than 1,000 homeowners in 12 communities across the country that are exposed to wildfire and wind risk to gain insight into their perceptions of risk exposure, as well as their views on mitigation and actual mitigation practices. While most homeowners had a realistic view of the level of risk they are exposed to, more than 70 percent reported having no plans to make financial investments to strengthen their home against wildfire, and more than 60 percent reported having no plans to make mitigation investments to strengthen their home against wind. The study is expected to be released in the first quarter of 2014.

Debra Ballen of IBHS facilitated a conversation about how to capture the hearts and minds of the general public and convince them of the importance of mitigation, ultimately empowering them to take action. Ballen likened the challenge at hand to that of selling safety improvements in motor vehicles. Attendees first identified the challenges to adopting mitigation techniques, which included:

- Lack of understanding of its importance
- Financial limitations
- Misperception of the risk
- Lack of political will for strong building codes and code enforcement

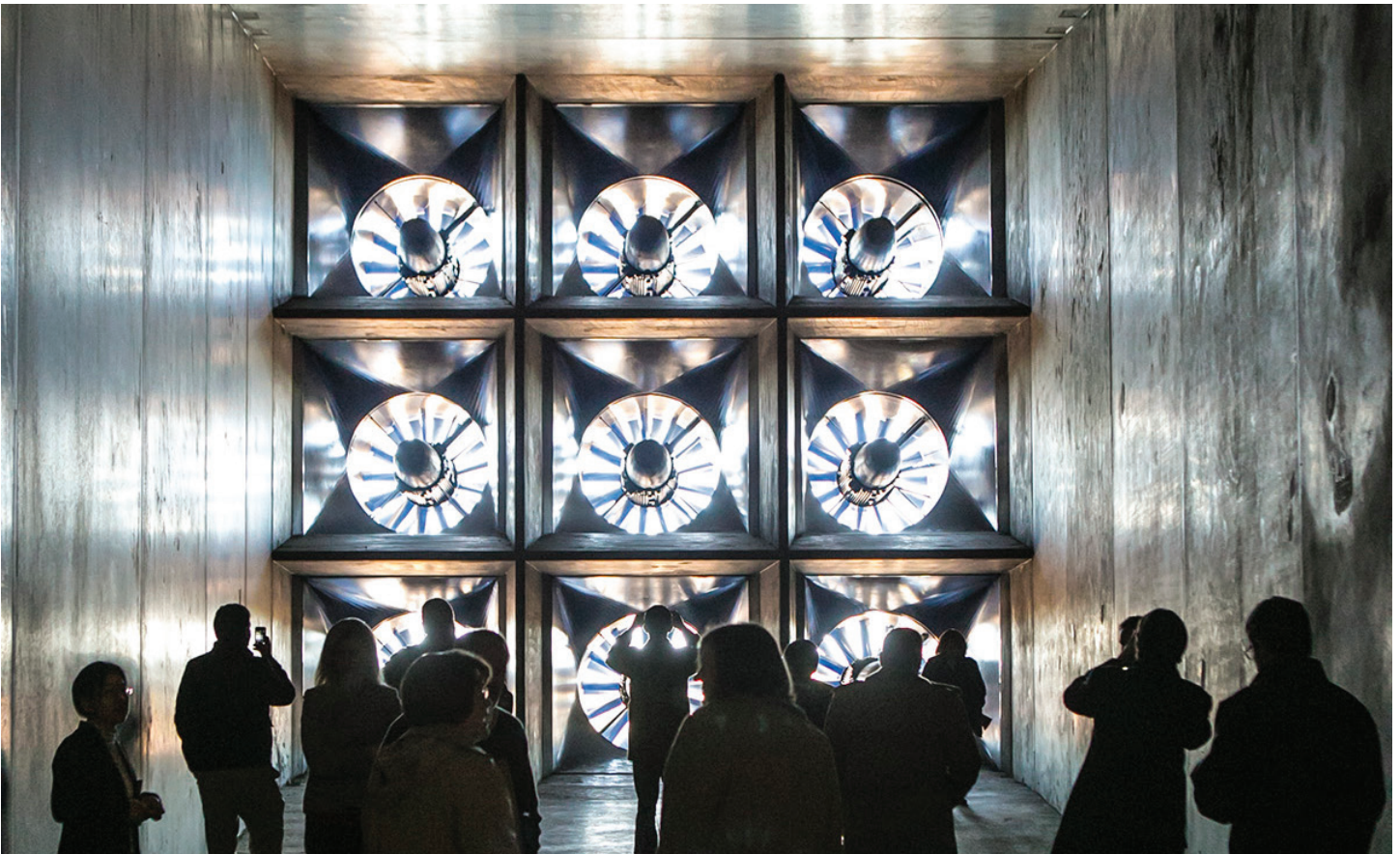
- Misunderstanding of the concept of insurance – thinking having insurance mitigates the underlying risk
- Lack of visible market value in mitigation – people can see the value of granite countertops in a kitchen, but can’t see a fortified roof

Given the challenges, the group then discussed what research and experience tells us will be effective in overcoming these challenges. In terms of messaging, while attendees agreed that one message does not fit all, a consistent and simple message is the key. There was also consensus that information needs to be personalized and delivered in graphic examples and specific scenarios. Financial incentives offered by communities, insurance companies and others will also encourage mitigation.

Regarding next steps, the group determined that there is an opportunity to translate existing research into sound bites and plain language to communicate the benefits of mitigation, including cost data, and to segment information by audience to avoid overwhelming the general public with information. There was also a lot of discussion about the importance of strengthening and enforcing building codes and a desire to hear more from code officials to identify the challenges they face, collect best practices and develop good case studies.

Professors Howard Kunreuther and Erwann Michael-Kerjan of the Wharton Risk Management and Decision Processes Center facilitated a conversation on obstacles and incentives to mitigation adoption. They began the discussion by asking attendees to identify the stakeholders – homeowners, the real estate community, builders and contractors, insurers, and bankers and public officials. The group next identified affordability as the top obstacle given the high upfront costs associated with mitigation measures. In addition, there is a tendency to focus on the benefits of mitigation over a two- or three-year period rather than over the life of the property. As a result, it is often viewed as financially unattractive. In talking





IBHS Research Center test chamber

about how to incentivize mitigation, attendees recommended studying the green building trend, specifically what made it emerge as a social cause and community value system. The example of the LED light bulb was given – highlighting that people are willing to pay more because it was successfully marketed as a long-term return on investment and social responsibility in the short-term by converting from traditional light bulbs. Other ideas for incentives included long-term loans to property owners to spread the upfront costs over time, tax credits for builders, property tax abatement and grant programs for low-income homeowners.

Eric Nelson of The Travelers Companies, Inc. facilitated the day's final conversation about political challenges to adopting mitigation measures. He started by asking the group who they were trying to influence. Responses ranged from the general public to federal, state and local government officials, to building code officials, to emergency responders. The group discussed the challenges broadly, which included:

- Competing political agendas
- Term limits of elected officials
- Funding challenges
- Federal vs. state issues and the division of power
- Well-educated voters that care about the issue

The conversation next turned to challenges specific to the National Flood Insurance Program, which attendees identified as:

- Definition of flood zones, mapping and data
- No incentive to mitigate without the existence of actuarially sound rates
- Affordability – risk-based rates are critical but some homeowners might need help affording the premiums
- Mortgage holders are not enforcing requirements to have flood insurance after the first year

Participants recommended learning from successes that communities have had with catastrophe savings accounts and mitigation incentives and credits. The group identified several next steps to overcome the challenges:

1. Increase outreach on a local level and involve community leaders
2. Encourage the private sector to leverage its influence
3. Enlist insurance agents and associations to support mitigation and encourage them to be active advocates



Eric Nelson, Travelers

The symposium concluded with a discussion on the future of mitigation. The group determined that more research is needed regarding affordability, homeowners' motivations, and the enforcement practices of building code officials and departments. There was also a consensus that existing research in this area needs to be distilled for applied use and translated into case studies to demonstrate techniques that work and don't work. Finally, it was suggested that as a research community, mitigation goals need to be clearly defined and a roadmap of responsibilities needs to be created that involves all stakeholders.