National Windstorm Impact Reduction Program (NWIRP) National Advisory Committee on Windstorm Impact Reduction (NACWIR)

Meeting Summary September 25, 2017 National Institute of Standards and Technology (NIST) Gaithersburg, Maryland

MEETING PARTICIPANTS

NACWIR Members:

Walker Ashley	Northern Illinois University
John Boudreaux	Assumption Parish Office of Homeland Security and
	Emergency Preparedness
Parthiv Dangodara	AIG Property Casualty
Wanda Edwards	RCI, Inc
Katherine Greig	New York City Mayor's Office of Recovery and Resiliency
Forrest Masters	University of Florida
Kishor Mehta	Texas Tech University
Walter Peacock	Texas A&M University
Tim Reinhold, Chair	Insurance Institute for Business and Home Safety
Donald Resio	University of North Florida
Donald Scott	PCS Structural Solutions
Kevin Simmons	Austin College

Windstorm Working Group (WWG)

Marc Levitan	National Institute of Standards and Technology
Jacqueline Meszaros	Office of Science and Technology Policy
Shirley Murillo	National Oceanographic and Atmospheric Administration
Joy Pauschke	National Science Foundation
Jonathan Westcott	Federal Emergency Management Agency

NIST Staff

Jason Averill, DFO	Division Chief, Materials and Structural Systems Division
Cartier Murrill	Engineering Laboratory Technical Support
Steve Potts	Program Analyst, NWIRP

Members of the Public

Aaron Kielser	Lewis-Burke Associates, LLC
Phil Smith	FM Approvals

SUMMARY OF DISCUSSION

I. Opening Remarks

Jason Averill, Chief of the Materials and Structural Systems Division opened the meeting and identified himself as the Designated Federal Officer (DFO) for the meeting. Averill turned the meeting over to Dr. Tim Reinhold, Chair of the Committee.

Reinhold stated this is the sixth and final meeting of the Committee. He told the Committee we have approved the meeting summaries for the first three meetings, and will receive the summaries for the remaining meetings this week. Any changes will need to be sent in this week.

Reinhold noted that he received comments from several people on the assessments and recommendations document. The purpose of the meeting would be to walk through those comments, decide on the edits, and add any final edits desired by the Committee.

II. Summary of Significant Edits to the Document.

- The Committee discussed the title of the document and decided that it will be: "Assessments of and Recommendations for the National Windstorm Impact Reduction Program and its Implementation."
- The Committee agreed to add a sentence to the paragraph on Changing Patterns of Community Planning section indicating that Hurricanes Harvey, Irma and Maria will likely spur more planning efforts.
- The Committee agreed to add a sentence to the paragraph on Insurance describing that as costs of insurance rise, many low-income homeowners may opt out of coverage entirely, which will further exacerbate the ability of at-risk communities to recover.
- In the section on Design and Construction, the Committee agreed to add a sentence to the paragraph discussing the continued need for codes and standards, describing that the incidence of more frequent and more powerful wind events will prompt the need to assess the standards to which codes are developed.
- Reinhold requested a reference for the statement "Death and injury statistics demonstrate that a large portion of windstorm related deaths and injuries occur in HUD Code manufactured homes." Ashley provided the following references:
 - Ashley, W. S., 2007: Spatial and temporal analysis of tornado fatalities in the United States: 1880-2005. *Weather and Forecasting*, **22**, 1214-1228.
 - Sutter, D., and K. M. Simmons, 2010: Tornado fatalities and mobile homes in the United States. *Natural Hazards*, **53**, 125-137.
- A question was posed whether the Committee should comment on the quality of Harvey, Irma and Maria forecasts. After discussion, however, it was clarified that there are no existing evaluations, but those will be done by the end of the year. The Committee agreed that nothing needed be added here.

Reinhold asked if there were any other comments to add. He noted that an early draft of the report was distributed to the Roofing Industry Committee on Weather Issues, Inc (RICOWI) and one RICOWI member responded with a concern that the report was being too critical on products with wind ratings. Reinhold added that he asked two of the Committee members to go back and evaluate this, and they found that the sections in question had been edited and the current language in the report is general enough, and furthermore that there are enough well-known problems with these products to justify the current language. The Committee decided that content currently in the report is sufficient.

Reinhold closed the edits to the body of the report, and moved to the Executive Summary. The most significant discussion and edits to this section included:

- The term "hailstorms" was replaced by thunderstorms in a sentence in the second paragraph describing events which might increasingly affect large numbers of properties and infrastructure, as more general and since the Strategic Plan did not have any focus on hail.
- A suggestion was made that the report provide an example of how inadequate funding has impacted the NWIRP agencies' ability to implement research results within the Program. The Committee agreed to add an example about how NSF funds research to improve the understanding and modeling of various windstorm related phenomenon; but, there are no funds available to apply those models to improve guidance for design or to develop tables or enough data to support building code changes.

III. Public Comment Period.

Reinhold asked if any of the members of the public who registered to participate in the meeting would like to add anything. Mr. Smith asked if members of the public would be able to see the report. Averill responded that once the report is finalized, it will be sent to the NIST Director. Then it will go to the leadership of the NWIRP agencies. In parallel, NIST will post the report to the NACWIR website (<u>https://www.nist.gov/el/materials-and-structural-systems-division-73100/national-windstorm-impact-reduction-program-1</u>) so the public will have access to it as well. Averill also committed that the NWIRP program will send notification to members of the public who have registered to participate in any of the NACWIR meetings.

IV. Adjournment

Reinhold asked for any final edits or comments. There being none, the Committee members thanked Reinhold for his hard work in pulling all of this together. Reinhold and Averill then both thanked the Committee for their efforts. The meeting adjourned the meeting at 9:50 a.m. EDT.