NSF IUCRC for Wind Hazard and Infrastructure Performance (WHIP)

Year 2, Phase II Annual Meeting Minutes

September 14–15, 2026 | FIU in Washington, D.C.

1. Attendance

Attendance was recorded for both in-person and virtual participation. Attendees who participated in person are listed only under In-Person Attendance, even if they joined virtually for part of the meeting.

In-Person Attendance

Name	Organization / Affiliation
Anna Elizabeth Thomas	Texas Tech University
Ioannis Zisis	Florida International University
Delong Zuo	Texas Tech University
Patricia Bela	Texas Tech University
Denis Gray	National Science Foundation
Yann Schwarz	ENSTALL
Tanya Brown-Giammanco	NIST
Ming Shiao	GAF
Un Yong Jeong	Gradient Wind
Marc Levitan	NIST
Dustin Haddock	S-5!
Zachary Wienhoff	State Farm Insurance
Karthik Ramanathan	Verisk

Virtual / Online Attendance

Virtual / Online Attendee	Organization / Affiliation
Faiaz Khaled	Texas Tech University
Tim Doggett	Berkshire Hathaway
Ziad Azzi	DDA Forensics
Kishor Mehta	Texas Tech University
Guangzhao Chen	Texas Tech University
Zhiheng Wang	Texas Tech University
Brian Hirth	Texas Tech University
Thomas Baheru	Berkshire Hathaway
Wendy Zepeda	Florida International University
Omar Nofal	Florida International University
Mark Gies	S-5!
Yimin Lu	Texas Tech University
Haitham Mohamed	Florida International University

Virtual / Online Attendee	Organization / Affiliation
Bowei Li	Texas Tech University
Arindam Chowdhury	Florida International University
Amal Elawady	Florida International University
Jean-Paul Pinelli	Florida Tech

2. Brief Comments by the Directors

Dr. Delong Zuo briefly presented the State of WHIP.

3. Research Proposal Presentations

The following research proposals were presented during the September 14 session:

#	Project Title	Presenter(s)
1	Effects of Building Orientation and Garage-Door Failure on Tornado-Induced Roof Damage in Wood-Frame Homes	Guangzhao Chen; Delong Zuo
2	Evaluation of Inelastic Performance of Tall Buildings under Nonstationary Extreme Winds	Xinzhong Chen
3	Physics-Based Assessment of Tornado–Building Interaction: From Relative-Scale Effects to Neighborhood Vulnerability	Faiaz Khaled
4	Feasibility Study for Post-Hazard Local Wind Field Reconstruction: Integrating Field Observations, LES, and Generative AI	Faiaz Khaled; Yimin Lu; Brian Hirth; Advisor: John Schroeder
5	Roof-Initiated Damage Propagation and Functional Consequences in Data Center Rooftop Equipment-Roof Systems under Tornados	Bowei Li
6	Full-Scale Observational Models and Evidence-Based Calibration for WHIP's Wind-Surge Building Damage Tool	Yimin Lu; Doug Smith
7	Probabilistic Risk Analysis of Trees Under Wind Loading	Zhiheng Wang
8	Wind Loads on Rooftop PV Systems on Partially Elevated Coastal Homes	Amal Elawady; Haitham Ibrahim
9	Wind Uplift Performance of Hip & Ridge Shingles Across Roof Slopes	Arindam Gan Chowdhury; Ioannis Zisis
10	Tornado-Like Loading on Buildings of Representative Complex Shapes	Delong Zuo
11	Physics-Informed Generative AI for Post-Event Tornado Wind-Swath Reconstruction from Multi-Source Damage Evidence	Omar Nofal
12	Wind Effects on Deflected Ballasted PV Arrays: Synthesis, Literature Review, and Code Recommendations	Ioannis Zisis; Arindam Gan Chowdhury
13	Risk Vulnerability Model for Components of Refinery Plants or Industrial Facilities	Jean-Paul Pinelli

4. Projects Approved

Following the closed IAB session on September 15, the IAB selected the projects listed below for funding.

Project #	Project Title	PI(s)
WHIP2026_02	Evaluation of Inelastic Performance of Tall Buildings under Nonstationary Extreme Winds	Xinzhong Chen
WHIP2026_04	Feasibility Study for Post-Hazard Local Wind Field Reconstruction: Integrating Field Observations, LES, and Generative AI	Faiaz Khaled; Yimin Lu; Brian Hirth

Project #	Project Title	PI(s)
WHIP2026_06	Full-Scale Observational Models and Evidence-Based Calibration for WHIP's Wind-Surge Building Damage Tool	Yimin Lu; Doug Smith
WHIP2026_08	Wind Loads on Rooftop PV Systems on Partially Elevated Coastal Homes	Amal Elawady; Haitham Mohamed
WHIP2026_09	Wind Uplift Performance of Hip & Ridge Shingles Across Roof Slopes	Arindam Chowdhury; Ioannis Zisis
WHIP2026_012	Wind Effects on Deflected Ballasted PV Arrays: Synthesis, Literature Review, and Code Recommendations	Ioannis Zisis; Arindam Chowdhury
WHIP2026_013	Risk Vulnerability Model for Components of Refinery Plants or Industrial Facilities	Jean-Paul Pinelli

5. Remarks by IAB Chair Marc Levitan to the Directors

- Earlier planning for future annual meetings would be helpful to IAB members.
- Research discussions should identify subject areas of common interest to multiple member companies.
- Beginning next year, project selection should use a 10-point voting system, with each IAB member allocated 10 points to distribute among the proposed projects.

6. IAB Leadership

Marc Levitan will continue as IAB Chair. A Vice-Chair was elected during the closed IAB session.

Vice-Chair: Zachary Wienhoff

7. Adjournment

The annual meeting adjourned on September 15, 2026, following the IAB debriefing to the Site Directors.